

# The challenge of HIV/AIDS for South African cities

Based on research reports compiled by Richard Tomlinson and Gayatri Singh Edited by Melinda Silverman 20 September 2005

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### **ABBREVIATIONS**

AIDS Acquired Immunodeficiency Syndrome.

ART Anti-retroviral treatment

ARV Anti-retroviral

HIV Human Immunodeficiency Virus

PMTCT Prevention of mother to child transmission

TB Tuberculosis

VCT Voluntary Counselling and Testing

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### NOTE

This report is a compilation and edited version of three discussion documents compiled by Richard Tomlinson and Gayatri Singh.

# CHAPTER 1: INTRODUCTION

The HIV/AIDS pandemic is conventionally seen as a health problem, and therefore the responsibility of health departments. This overly narrow interpretation obscures the more complex interrelationships between the pandemic and other urban processes such as population dynamics, urban poverty, access to clean water, sanitation and electricity, and the increasing inability of the poor to pay for these services. HIV/AIDS thus sits at the heart of city development, impacting on cities' productivity, capacity to include all residents, and ability to be well-governed. HIV/AIDS is therefore much more than a health issue, placing enormous demands on urban managers to respond appropriately.

# The challenges of HIV/AIDS

We know that huge numbers of people are affected by HIV/AIDS, but uncertainty about how many there are, and where they are, impacts on the ability of cities to understand the demographic dynamics and plan accordingly. Common indicators for HIV/AIDS prevalence among households include race, age, gender and settlement type. The most significant indicator for urban managers is that the HIV/AIDS pandemic is most commonly associated with informal settlements where it is most difficult to deliver the urban services – water, sanitation and electricity – that might help mitigate the effects of the disease.

HIV/AIDS increases the economic pressures that create migrancy, and migrancy in turn increases the spread of HIV/AIDS, a vicious circle that puts the most vulnerable households at even greater risk. Complex population shifts arise: the disease drives infected people out of the cities and back to families in rural areas for care in the final stages of the disease. Orphaned children are sent back to rural areas to be cared for by grandparents or relatives. A reverse pattern also occurs, driving infected people from rural areas to cities in search of better health services, and placing increasing strain on the cities to deliver appropriate services.

HIV/AIDS tends to be elusive: no symptoms are immediately visible, and the disease acts slowly over a number of years. An urban manager can be easily mislead into assuming that no crisis exists, and that therefore no urgent response is necessary at the urban level. City officials need to understand the trajectory of the disease, which tends to affect residents during their most productive years, both as workers and as parents raising children. The long-term effect is to progressively impede the ability of infected people to work effectively, endangering their ability to hold down jobs, plunging their families into poverty, and, on the city scale, weakening the productivity of the urban economy. Children become orphans, spreading the economic burden to the families of relatives. The destabilising of households is likely to cause social instability.

A vicious cycle emerges, in which urban poverty exacerbates HIV/AIDS, and HIV/AIDS exacerbates urban poverty. The problems of social access associated with poverty, such as inadequate housing, sanitation and urban services, and inadequate nutrition, exacerbate the spread of opportunistic diseases that may strike during the later stages

of the disease. At the same time, the increased need for households to spend money on medicine, coupled with the inability of breadwinners to earn a living, plunges households into poverty. The impact of poverty is experienced not only by households where one or more members are affected by HIV/AIDS, but by the families of relatives or friends, who must take up their burdens. This impacts on the ability of increasingly impoverished households to pay for municipal services, which in turn impacts on urban governance.

### CHAPTER 2: HIV/AIDS PREVALENCE IN SOUTH AFRICA

South Africa is recorded as having the largest number of persons living with HIV/AIDS in the world.<sup>1</sup>. In their 2004 annual report, the Red Cross has declared the epidemic of HIV/AIDS a 'disaster' for Southern Africa<sup>2</sup>. In the World Health Organisation's ranking of countries by prevalence, eight out of the top ten countries are in the southern African region: Botswana (38.8%), Zimbabwe (33.7%), Swaziland (33.4%), Lesotho (31.0%), Namibia (22.5%), South Africa (20.1%), Zambia (21.5%) and Mozambique (13.0%)<sup>3</sup>. Life expectancy by 2010 is expected to drop by 20 years, from 68 to 48 years, child mortality is expected to double and there may be an additional two million AIDS orphans<sup>4</sup>.

Most of the data on the prevalence and incidence of the epidemic is based on antenatal clinic sentinel data, in the absence of population based studies. This data is subject to selection biases, such as convenience in choosing the sample sites, the extent of the usage and coverage of antenatal clinic services, differentials in risk behaviours and contraceptive use, and lower fertility rates among women with HIV infection<sup>5</sup>. There may be other socio-demographic factors like the age distribution of those attending antenatal clinics, the level of education, socio-economic status, and migration patterns that could affect the accuracy of generalisations made from this data, especially its authenticity over time<sup>6</sup>.

Sounding the figures against data from population-based surveys can help rectify these biases. The Nelson Mandela/Human Science Research Council conducted such a population-based survey in South Africa in 2002. The survey was household-based which unfortunately excluded homeless people, those living in institutionalised settings, such as university dormitories, prisons, barracks as well as migrants in overcrowded inner city settings or single sex hostels. This probably resulted in an underestimation of the prevalence of HIV. But even so, it has been hailed as a source of valuable information, allowing necessary 'calibrations' of results obtained from pregnant women<sup>7</sup>.

<sup>&</sup>lt;sup>1</sup> Rhele and Shisana 2003

<sup>&</sup>lt;sup>2</sup> (BW check)

<sup>&</sup>lt;sup>3</sup> (BW Ref)

<sup>&</sup>lt;sup>4</sup> (Taylor 1998 UNAIDS See 13 SAMP IOM, 2005 BW see for sector deaths).

<sup>&</sup>lt;sup>5</sup> (Gray, Wawer, Serwadda, Swankambo, Li & Wabwire-Mangen, 1998 in Rhele and Shisana 2003 BW)

<sup>&</sup>lt;sup>6</sup> (Rhele and Shisana 2003)

<sup>&</sup>lt;sup>7</sup> (Rhele and Shisana 2003) The Epidemic Projection Package (EPP) recently developed by the UNAIDS Reference Group on Estimates, Models and Projections and the Spectrum model program developed by the Futures Group were used to model the South African HIV epidemic, project future trends in HIV/AIDS and estimate the demographic impact of AIDS. The national HIV prevalence surveys among pregnant women

The projections made for selected years up to 2020 reflect the devastating effect of AIDS on South Africa.

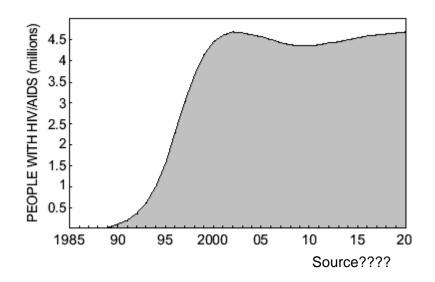
Table 1: Estimations of cumulative number of deaths in South Africa by 2020 based on current data

Year	Cumulative number of deaths
By 2000	0.71 million
By 2003	1.69 million
By 2005	2.56 million
By 2010	4.96 million
By 2015	7.15 million
By 2020	9.31 million

(Rhele and Shisana 2003)

The peak adult (15–49 years) HIV prevalence rate for South Africa was calculated to be 17.3% in the year 2001, with 2.34 million women and 1.71 million men living with HIV/AIDS in that year (female to male ratio 1.37). Prevalence is expected to fall slightly until 2010 (15.2%) and is projected to remain relatively stable at this level until the end of the modelled period (15.7% in 2020).

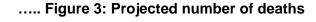
Figure 1: HIV/ AIDS prevalence in South Africa

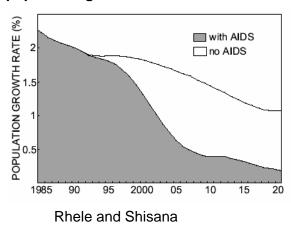


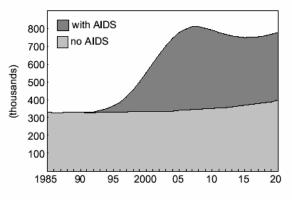
The demographic impact of these results is expected to look like this for South Africa:

from 1990–2001 and the first national, population-based HIV survey in 2002 served as the data sets used to calibrate the input HIV prevalence values for the model (Rhele and Shisana 2003)

Figure 2: Estimated annual population growth rate in %







Rhele and Shisana

These figures provide only one set of estimates about the effects of the HIV/AIDS pandemic, with various sources providing different statistics. For example, HIV prevalence in the whole of South Africa for 2004 is estimated at:

- 3.8 million by Statistics South Africa;
- 4.6 million by the Human Sciences Research Council;
- 5 million by the Actuarial Society of South Africa (ASSA);
- 5.6 million by UNAIDS; and
- 5.6 million by the Department of Health.

What is certain, is that "the HIV/AIDS pandemic is the single most important phenomenon that will shape future demographic and development trends in South Africa"<sup>8</sup>

The Actuarial Society of South Africa ASSA 2002 model<sup>9</sup>, which sits in the middle of the range, offers some detail about these demographic trends. This is illustrated in Table 1 which shows projections to 2015. The ASSA projections to 2015 take into account various assumptions about:

- information and education campaigns;
- improved treatment of sexually transmitted diseases;
- voluntary counselling and testing;
- mother-to-child transmission prevention, and
- anti-retroviral treatment.

Therefore the results vary considerably according to the assumptions. Indeed the projections show that various interventions have had - and are continuing to have - a significant impact on the course of the epidemic. The prevention of mother to child transmission programme, for example, has reduced the number of babies infected. Also

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<sup>&</sup>lt;sup>8</sup> According to the State of South Africa's Population Report: Population, Poverty and Vulnerability (2000:61) Calitz, AIDS Discussion Paper 2004.

<sup>&</sup>lt;sup>9</sup> Dorrington et al. 2004: 24

behaviour change associated with the increasing use of condoms has reduced the number of adults infected.

Table 2 based on a default scenario<sup>10</sup> illustrates the effect of the disease for South Africa as a whole. The table 2 shows the overall expected trends for population size, the number of people infected with HIV, the number AIDS sick, and the number of accumulated AIDS deaths for each year. It can be seen from the table that the total population continues to increase over the period, although at a decreasing rate. From 2011, the expected annual rate of increase is 0.4%. The number of people infected with HIV peaks in 2013, at just over 5.4 million, after which it starts to decrease slowly. In contrast, the number of people sick with AIDS each year continues to rise over the period, reaching nearly 743 000 in 2015. Accumulated AIDS deaths will be close to 5.4 million by the same year. In 2004 it was estimated that over 1,2 million people had already died as a result of AIDS, just over 5 million were infected with HIV, and over 500 000 were AIDS sick.

The national anti-retroviral treatment programme (ART) can be expected to play a particularly important role in the future outcome of the epidemic. For example, as shown in Table 2, the model projects that by 2010, there are likely to be roughly 381 000 AIDS deaths per annum rather than the 495 000 that would have been expected if no ART programmes were introduced. In the default scenario, it is assumed that ultimately only about half of South Africans who need ART will be able to access it. However, if it is assumed that only 20% manage to access ART, then the estimated number of AIDS deaths in 2010 increases to 450 000. If the proportion of individuals accessing ART is as high as 90%, the number of AIDS deaths would be reduced to 290 000.

While the period up to 2015 is covered in the projections, it is expected that the number of people sick with AIDS will continue to increase after this time.

THE CHALLENGE OF HIV/AIDS FOR SOUTH AFRICAN CITIES

<sup>&</sup>lt;sup>10</sup> What is the default scenario???

Table 2: Projected population, number of HIV positive, AIDS sick and cumulative AIDS deaths for 1990-2015

Year	Total population	Annual growth rate	Total HIV+	Cumulative AIDS deaths	Total AIDS sick
1990	35 538 787	1.8%	38 597	326	293
1991	36 240 467	2.0%	83 498	851	741
1992	37 114 697	2.4%	170 469	2 061	1 750
1993	38 074 173	2.6%	323 473	4 704	3 892
1994	39 092 136	2.7%	571 958	10 140	8 158
1995	40 153 091	2.7%	943 590	20 662	16 135
1996	41 229 197	2.7%	1 447 952	39 855	30 123
1997	41 978 303	1.8%	2 028 544	72 804	52 305
1998	42 690 294	1.7%	2 632 714	125 488	85 620
1999	43 352 481	1.6%	3 212 716	204 933	132 518
2000	43 966 756	1.4%	3 731 645	318 697	194 424
2001	44 524 453	1.3%	4 176 138	473 326	268 545
2002	45 016 927	1.1%	4 539 754	673 232	351 878
2003	45 452 388	1.0%	4 820 223	919 883	439 086
2004	45 830 002	0.8%	5 024 237	1 212 117	525 461
2005	46 156 343	0.7%	5 165 797	1 542 169	589 454
2006	46 443 101	0.6%	5 259 148	1 897 965	636 131
2007	46 700 411	0.6%	5 319 835	2 269 574	663 547
2008	46 938 003	0.5%	5 359 890	2 648 012	677 102
2009	47 164 179	0.5%	5 388 805	3 026 181	678 695
2010	47 380 126	0.5%	5 408 621	3 404 415	692 511
2011	47 582 605	0.4%	5 418 096	3 787 573	708 472
2012	47 772 800	0.4%	5 419 579	4 175 979	722 262
2013	47 953 297	0.4%	5 416 539	4 568 340	732 402
2014	48 126 588	0.4%	5 411 964	4 962 998	738 865
2015	48 294 565	0.3%	5 407 945	5 358 501	742 261

ASSA 2002 (default scenario)

# **HIV/AIDS PREVALENCE IN CITIES**

While the above figures refer to South Africa as a whole, a number of studies have been conducted at a more local level, notably the Human Sciences Research Council Survey of the Nelson Mandela Metropolitan Municipality undertaken in 2002 (NM/HSRC). While

probably the most reliable source of information on HIV prevalence, the survey acknowledges that it "may be underestimating HIV prevalence". 11

According to the NM/HSRC survey it is reported that "the most important demographic predictors of HIV are:

- race:
- age;
- sex of respondent;
- · locality type; and
- province of residence.

"Education and economic status [are] not significant independent predictors." Employment status is also not a predictor of HIV/AIDS.

Findings differ according to population group. Among Asians, coloureds and whites, HIV prevalence decreases as socio-economic status and education levels increase. The same is not true for Africans where, "there is a significant increase in HIV prevalence with increasing levels of education." While these racial differentials seem counterintuitive, they are sustained by other research. For example, a detailed study of HIV prevalence in the rural district of Sekhukhuneland in Limpopo, also points to the "absence of an association between HIV prevalence and... poverty and education..."

### Gender, race and age

The key finding of the Nelson Mandela/ HSRC survey is that HIV prevalence is significantly higher among Africans and among women and in certain age cohorts. The following tables give both the percentages of people affected by HIV and the confidence interval of the survey<sup>15</sup>,

<sup>&</sup>lt;sup>11</sup> HSRC/ NM 2002: 58. This underestimation is the result of a number of methodological problems. The survey, for example, assumes that the 30% of the sample population who refused to participate in the survey have the same prevalence rate as those who did. However it is likely that these 30% are likely to have a higher prevalence, explaining their reluctance to participate in the survey. In addition, the survey was not conducted for persons living in army barracks, prisons, boarding schools and other institutions, where HIV/AIDS prevalence might be high. The critical assessment of the survey methodology states that HIV prevalence may be under-reported. Indeed, in the NM/HSRC survey itself it is noted that people living in institutions were not surveyed and that children under 2 were not tested.

<sup>12</sup> NM/HSRC 2002: 56

<sup>&</sup>lt;sup>13</sup> NM/HSRC 2002: 55

<sup>&</sup>lt;sup>14</sup> Pronyk et al 2005 (draft)

<sup>&</sup>lt;sup>15</sup> The following tables include reference to confidence intervals. The HSRC uses 95% confidence intervals, which means that despite, say, total HIV prevalence being reported as 11.4%, this is the mean and the HSRC is only 95% confident that the true figure falls within 10.0% and 12.7%. Obviously the wider the confidence interval the less certain one can be that the mean actually is what it is reported to be. This concern with wide confidence intervals is obvious in the case of, say, the high prevalence reported in informal settlement. (See Table X.) The reader should look at the following tables with a watchful eye on the confidence interval column.

Table 3: HIV prevalence according to gender and race

Race	HIV positive (%)	Confidence interval (%)
Total	11.4	10.0 – 12.7
Male	9.5	8.0 – 11.1
Female	12.8	10.9 – 14.6
African	12.9	11.2 – 14.5
White	6.2	3.1 – 9.2
Coloured	6.1	4.5 – 7.8
Indian	1.6	0 – 3.4

Source: NM/HSRC, Table 12

Table 4: HIV prevalence according to age

Race	HIV positive (%)	Confidence interval (%)
Total	11.4	10.0 – 12.7
Child (< 2 years)	No data	
Children (2 – 14 yrs)	5.6	3.7 – 7.4
Youth (15 – 24 yrs)	9.3	7.3 – 11.2
Adults (25 yrs)	15.5	13.5 – 17.5

Source: NM/HSRC, Table 15

Table 4 creates the impression that HIV increases with age. This is incorrect since, as would be expected, there comes a point where HIV prevalence starts to decline. Table 5 provides a better illustration of HIV prevalence according to age, but is only available for women.

Table 5: HIV prevalence for women (15 – 49 years)

Age group	Women		African women		
	HIV positive (%)	Confidence interval (%)	HIV positive (%)	Confidence interval (%)	
15 – 19	5.9	4.7 – 11.3	7.5	4.5 – 12.0	
20 – 24	13.2	12.9 – 22.3	19.1	14.2 – 25.0	
25 – 29	28.3	24.8 – 40.1	38.6	30.0 – 48.1	
30 – 34	24.1	17.3 – 32.5	29.7	21.1 – 39.9	
35 – 39	15.6	8.7 – 21.1	17.5	10.9 – 26.8	
40 – 44	16.4	12.8 – 27.2	22.5	14.9 – 32.5	
45 – 49	11.5	6.5 – 18.7	11.3	5.6 – 21.3	

Source: NM/HSRC, Table 22

Table 5 shows that prevalence increases to a peak in the 25 - 29 age cohort, where the prevalence among African women of 38.6% is extraordinary. Where there are many African women of this age, there will be high HIV prevalence. Further, since in the 25 - 29 and 30 - 34 age cohorts there is little difference in the prevalence among men and

women, the same can be said for African men. These findings are especially significant when one turns to the high HIV prevalence in informal settlements.

As a result of the high prevalence of HIV in the 25 - 30 age cohort most AIDS deaths occur amongst adults at the life stage where they are caring from children and who are generally expected to be employed and income earners. The implications of this factor and its intersection with the time trajectory of the disease is discussed later in more detail.

### Settlement type

Table 6 shows that HIV prevalence in informal settlements is almost double that in formal settlements, although the confidence interval should give reason for caution.

Table 6: HIV prevalence according to locality type

Type of settlement	HIV positive (%)	Confidence interval (%)
Urban formal	12.1	10.3 – 14.0
Urban informal	21.3	16.2 – 26.5
Tribal	8.7	6.5 – 10.9
Farms	7.9	4.8 – 11.1

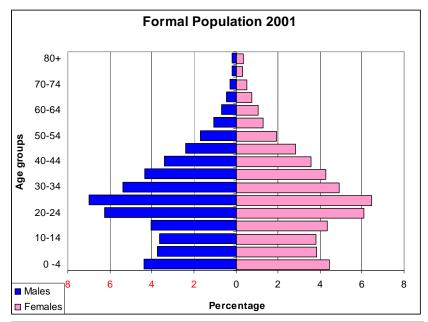
Source: NM/HSRC, Table 14

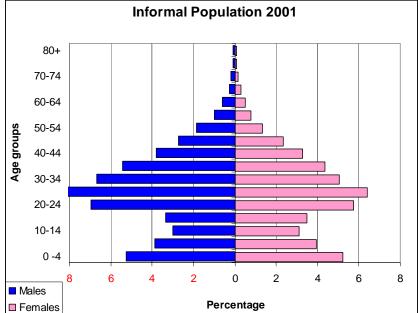
HIV prevalence is higher because:

- the higher the proportion of the population that is African;
- the higher the proportion of the population that is female; and
- the higher the proportion of the population that falls within the 25-29 and 30-34 age cohorts.

High proportions of Africans and high proportions of people falling within 25-29 and 30-34 age cohorts are found in informal settlements in cities with growing economies. This is the case in Johannesburg for example and not in Nelson Mandela, where the economy is in decline. In these age cohorts there is not much of a difference in the HIV prevalence of men and women. Figures 4 and 5 provide the population pyramids for Africans in 'urban formal' and 'urban informal' in Johannesburg and Nelson Mandela respectively.

Figure 4: Johannesburg African urban formal and informal populations according to age





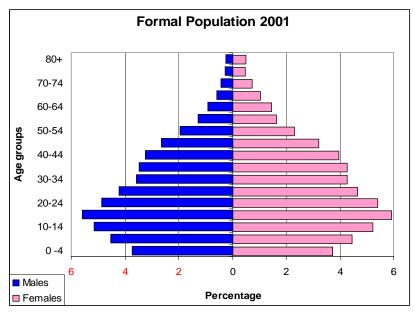
Source: Johan Calitz, Development Bank of Southern Africa

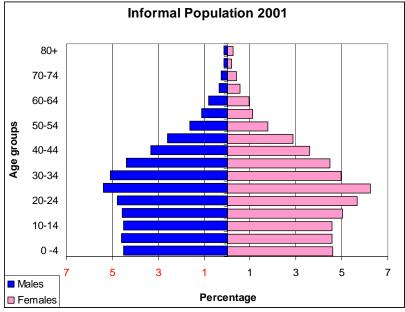
Comparing the urban formal and informal populations in Johannesburg shows that:

- a smaller proportion of the population in informal settlements is elderly or aged between 4 – 19;
- a higher proportion of the population is found in the 20 39 age cohorts; and
- there are more men than women in the high HIV prevalence age cohorts in informal settlements in Johannesburg.

The findings are not the same in Nelson Mandela.

Figure 5: Nelson Mandela African urban formal and informal populations according to age





Source: Johan Calitz, Development Bank of Southern Africa

In the case of Nelson Mandela

- the distribution of the population in informal settlements is also weighted toward the 25 – 39 age cohorts, but this is not nearly as pronounced as in Johannesburg;
- the distribution of the formal population is weighted towards youth, whereas that
  of Johannesburg is weighted towards those of working age; and

 a far higher proportion of the population in the informal settlements in Nelson Mandela falls within the youth category.

The interpretation of the figures is that people of working age population, often migrants are concentrated in cities with growing economies, such as the three metros in Gauteng – Johannesburg, Tshwane and Ekhuruleni - and to a lesser extent eThekwini and Cape Town. These cities are experiencing more rapid in-migration and will have a higher HIV prevalence due to the age structure of their population and a higher proportion of migrants. The extent to which migrancy impacts on HIV/AIDS prevalence is discussed later in more detail.

HIV prevalence is also related to age and locality type. As before, within the age cohorts where HIV is prevalent, the number of people in informal settlements who are affected by the disease is about double that in urban formal areas.

Table 7: HIV prevalence according to age and locality type

Type of settlement / Age	Age 15 – 24 (%)	Confidence interval (%)	Age 25 and above (%)	Confidence interval (%)
Total	9.3	7.3 – 11.2	15.5	13.5 – 17.5
Urban formal	9.3	6.6 – 12.0	15.7	12.7 – 18.6
Urban informal	20.2	12.3 – 28.1	28.6	21.6 – 35.6
Tribal	7	3.9 – 10.1	12.8	9.5 – 16.0
Farms	8.6	1.0 – 16.1	9.5	5.7 – 13.2

Source: NM/HSRC, Tables 18 and 21

It is apparent that HIV prevalence in informal settlements is a defining problem for city managers and that this is especially so given the important role that shelter and services can play in prevention and care.

# Dependency

There are no reliable data regarding child-headed households. The Nelson Mandela Children's Fund reported that in 2004 the numbers are still limited. There are projections for dependency in the case of the elderly. The projections are based on complex calculations and should be treated as illustrative. In addition, the fact that an elderly person lives with a child who has HIV does not necessarily indicate dependency. This will especially be the case if the ill-person is in stages 1 and 2 of the disease.

The projections are shown in Table 8. They reflect the percentage of persons aged 60, 65 and 70 who will have an adult child who is HIV+ or has died from an AIDS-related illness. The table points to a sharp increase in the aged who have infected offspring or offspring who have died from AIDS-related illnesses. The suggestion is that in 2010 48% of all 60-year old parents will be affected in this manner. Even allowing for the fact that the projections should be viewed as illustrative, it is apparent that very many among the

aged will be impoverished as a result of the death of off-spring and as a result of having to provide for grandchildren and other relatives.

Table 8: Percent of elderly age 60, 65 and 70 who, in 2010, will have an adult child infected with HIV, or dead due to AIDS<sup>16</sup>

Age	Infected	Dead
2005		
60	15%	2%
65	12%	1.3%
70	8%	1%
2010		
60	28%	20%
65	20%	15%
70	13%	10%

### Household income

There is often a presumption that household incomes are worse in 'tribal areas' 17. Using a figure of R3 500 per month, the maximum income to access to a household subsidy, which is close to the R3 200 household monthly income category used in the census, the proportion of households in a locality type with a monthly income below R3 200 was assessed according to the provinces. The results are shown in Table 9.

Table 8 has seven columns showing:

- the proportion of households in tribal areas with annual incomes of less than R38 401 (3 200 x 12 = 38 400);
- households living in tribal areas as a proportion of the total number of households in the province;
- the proportion of households in urban informal areas with an incomes of less than R38 401;
- households living in urban informal areas as a proportion of the total number of households in the province;
- the proportion of households in urban formal areas with an incomes of less than R38 401;
- households living in urban formal areas as a proportion of the total number of households in the province; and
- the total number of households in the province.

<sup>&</sup>lt;sup>16</sup> Based on Merli and Palloni (2004, Table 3, p. 54)

<sup>&</sup>lt;sup>17</sup> Census definition

Table 9: Households per area type with annual incomes of less than R38 401, listed according to provinces

	Tribal	Provincial households	Urban informal	Provincial households	Urban formal	Provincial households	Households in province
Eastern Cape	96%	51%	97%	9%	72%	34%	1 535 968
Free State	96%	8%	98%	13%	81%	62%	757 259
Gauteng	N/A	N/A	95%	12%	62%	72%	2 836 335
KwaZulu Natal	95%	38%	95%	12%	61%	38%	2 200 430
Limpopo	93%	75%	95%	2%	67%	11%	125 0363
Mpumalanga	94%	36%	95%	4%	71%	36%	783 004
North West	93%	44%	94%	6%	74%	35%	219 981
Northern Cape	Minimal	Minimal	95%	4%	76%	68%	977 949
Western Cape	N/A	N/A	96%	10%	54%	78%	1 208 982
South Africa	94%	28%	95%	9%	65%	50%	11 770 271

Source: 2001 Census, information provided by the DBSA. Obtain full DBSA ref. when the doc is published.

The proportion of households in tribal areas, shaded in grey, and in urban informal areas, shaded in blue, with annual incomes of less than R38 401 is more or less the same, ranging between 93% and 96%, for both provinces and the nation. This statistic is indicative of the extent of poverty in urban informal areas. The high cost of living in cities is probably due to the expenses associated with paying for a site, for water obtained informally, etc. Table 9 also shows the extent of poverty in urban formal areas, shaded in yellow, especially in the Free State. Areas left un-shaded are where the proportion of households living in a certain locality type are a small proportion of the province's population or where there is a lesser proportion of households with an annual income of less than R38 400. Provinces that face particular challenges in urban informal areas are the Eastern and Western Cape, Free State, Gauteng and KwaZulu Natal; and provinces that face particular challenges in urban formal areas are the Eastern Cape, Free State, Gauteng, Mpumulanga, North West and Northern Cape.

This suggests that all nine of the SACN cities are involved, but the challenges are not the same: they are exacerbated by high population growth rates in Gauteng and to a lesser extent in eThekwini and Cape Town.

Table 10 shows HIV prevalence according to province. HIV prevalence is highest in the Free State, Gauteng and Mpumulanga. If one takes the provincial differences into account, then the preceding statistics will vary. For example, HIV prevalence will be higher in informal settlements in Gauteng than in the North West. Variations of this sort obviously lead to considerable uncertainty regarding circumstances in any one city. There are no overall HIV prevalence data for each city.

Table 10: HIV prevalence according to province

Province	HIV positive (%)	Confidence interval (%)
Western Cape	10.7	6.4 – 15.0
Eastern Cape	6.6	4.5 – 8.7
Northern Cape	8.4	5.0 – 11.7
Free State	14.9	9.5 – 20.3
KwaZulu Natal	11.7	8.2 – 15.2
North West	10.3	6.8 – 13.8
Gauteng	14.7	11.3 – 18.1
Mpumulanga	14.1	9.7 – 18.5
Limpopo	9.8	5.9 – 13.7

Source ???: Table 13

### **Determining HIV prevalence in Johannesburg**

While no statistics exist for HIV prevalence in South Africa's cities, with the exception of Nelson Mandela, it is possible to approximate the number of people infected by HIV/AIDS using the tables in this report and some additional data from the census. For the purposes of illustration, the HIV prevalence has been calculated for the City of Johannesburg.

The first step involved in the calculation is to determine the size of Johannesburg's population living in formal and informal areas. The figures were obtained from the 2001 census and have been rounded to the nearest 1000.

Johannesburg's population according to the 2001 census 3 226 000

Johannesburg's population living in formal settlements 78% or 2 512 000

Johannesburg's population living in informal settlements 22% or 710 000

The second step is to multiply the formal and informal populations by the HIV prevalence percentages for South Africa's urban formal (12.1%) and informal (21.3%) population.

HIV+ population in formal settlements 2 512 000 x 0.12 HIV+ population +/- 301 000 HIV+ population in informal settlements 710 000 x 0.21 HIV+ population +/- 149 000 Total prevalence +/- 450 000

The proportion of Johannesburg's population that is HIV+ is in the area of 450 000 persons, which is 14% of Johannesburg's population. This percent is higher than the national prevalence, but is easily explained due to the city's being urban, having a large population living informal settlements and being the recipient of migrants.

The statistic that may be of greater interest is the proportion of households having a member that is HIV+ or has AIDS. This statistic is significant because services connections are made to households; household incomes go towards paying for services, because the capital and operating subsidies for housing and municipal services are based on households; and because backlog estimates are based on households.

Households that have one adult that is HIV+ will more than proportionately have another (the sexual partner) who is HIV+. The proportion of the city's households that have at least one member who is HIV+ or has AIDS is unknown. Yet, if one were to assume that the proportion is, say, 10% of the city's households, this does not mean that 10% of the city's households require measures to reduce the impact of HIV/AIDS on poverty, largely because the effects of the disease only become serious when HIV mutates into AIDS. Thus in any one year it will be only, say, 2% of the city's households that will have one or more members whose circumstances are diminished due to ill-health. There will still be many households however that are providing assistance during this period, or that, after the death of the AIDS infected individual, will be caring for orphans.

The proportion of a city's households that are affected by HIV/AIDS is highly speculative<sup>18</sup>. This is an area that warrants further research.

<sup>&</sup>lt;sup>18</sup> The calculation of HIV prevalence for Johannesburg is very rough and based on the assumptions that the HSRC survey accurately reflects urban formal and informal HIV prevalence in South Africa and that these prevalence rates approximate those in Johannesburg. Both assumptions are problematic. There are at least three reasons for concern. The first has to with the wide confidence intervals, especially in respect of urban informal settlements. The second is that HIV prevalence is higher in Gauteng and that calculations based on the national mean are likely to underestimate the actual prevalence. The third has to do with the fact that a higher proportion of Johannesburg's urban formal population is white than in most other urban areas. This

# CHAPTER 4: THE RELATIONSHIP BETWEEN MIGRATION AND HIV/AIDS

The difficulty of determining HIV prevalence in cities has been compounded by the fact that urban populations in South Africa's cities are highly mobile. Yet much of the literature on migration trends and demographic changes has, until recently, failed to take into the complex links between HIV prevalence and migratory patterns.

It has become something of a truism to connect the spread of HIV to the migration of human beings in spatial terms. Yet the association between migration and HIV is more likely to be a result of "the conditions and structure of the migration process than the actual dissemination of the virus along the corridors of migration." Much of the research on Southern Africa's HIV/AIDS epidemic has neglected important socioeconomic, legal, and cultural dynamics of migration that may be contributing to the spread of HIV/AIDS.

While migration is often posited as a significant vector in the disease's spread, there is very little understanding of how human movement contributes to new infections. Nor is there a detailed understanding of HIV-fuelled migration in order to access better health care or to 'return home to die'. The need to explain these processes is now acute, and nowhere more so than in southern Africa, where median HIV prevalence rates hover around 27% for South Africa, 30% in Zimbabwe, 16% in Mozambique and 39% in Botswana<sup>20</sup>.

The relationship between migration and HIV/AIDS operates in two ways. On the one hand, migration results in an increased vulnerability to HIV infections. Conversely, the need to cope with illness due to HIV results in new forms of migration, both to and from cities.

# Migration and increased vulnerability to HIV/AIDS

Barnett and Whiteside have analysed the kind of a society most able to deal with the HIV epidemic<sup>21</sup>. They argue that a wealthy society with high levels of social cohesion is likely to cope well with the disease. This is the case in most developed countries such as the United States of America, the United Kingdom and Australia. Poor societies, like Zimbabwe, with low levels of social cohesion will have the worst deal. Countries, like South Africa and Botswana, which are fairly wealthy but have low levels of social cohesion, with large inequalities between their residents and large disparities in health, fall between these two extremes.

should serve to reduce prevalence in some urban formal areas. As a result, the calculations should, at best, be viewed as illustrative and should not be reported as fact. The same calculations can be undertaken for the other SACN cities.

<sup>21</sup> Barnett and Whiteside ??? ???

<sup>&</sup>lt;sup>19</sup> Decosas and Adrien 1997: ??

<sup>&</sup>lt;sup>20</sup> Figures calculated from UNAIDS 2004 Epidemiological Fact Sheets for different countries that give estimates up till 2002. See: <a href="http://www.unaids.org/en/resources/epidemiology.asp">http://www.unaids.org/en/resources/epidemiology.asp</a>

### Informal settlements

The large numbers of people living in informal settlements in South Africa also contributes to prevalence of HIV/AIDS. The Nelson Mandela/HSRC Survey shows that while the epidemic in South Africa is generalised throughout the population, the highest prevalence was found in those living in urban informal settlements. The contributing factors for the higher rates of prevalence in informal settlements in urban areas were ascribed to labour migration, mobility and repeated relocation. According to Dr. Shisana, Executive Director of HSRC's Unit on Social Aspects of HIV/AIDS and Health and Principal Investigator on this Nelson Mandela study, "the mobility and transient nature of life in informal settlements, rather than socio-economic status, makes those living in these areas most vulnerable to HIV."<sup>22</sup> A large percentage of men (23.5%) living in informal settlements reported more than one sexual partner in the past year, as compared to19.2% in tribal areas, 10.2% in urban formal areas and 8.2% in farms. Youth, aged between 15 and 24, in informal settlements had a significantly higher rate of sexual experience (74%) than those in rural areas (58.3%) and formal urban areas (53.2%).

### How migration contributes to the high prevalence of HIV/AIDS

Many reasons have been given for southern Africa's high level of HIV prevalence. Among others, these include:

- overall high rates of disease, especially sexually transmitted disease and tuberculosis;
- high levels of poverty
- social inequalities as a result of apartheid;
- xenophobic sentiments;
- gender power imbalances that make condom negotiation difficult;
- low levels of political will, lack of access to basic services including health, education, housing, water and sanitation.

However, perhaps the most neglected factor has been the prevalence of migration in the country as well as in the region.

There is an obvious connection between the spread of an infectious disease and increased mobility. Since the early part of the twentieth century, migration has facilitated the spread of infectious diseases in South Africa<sup>24</sup>. More recently, there was worldwide panic with the outbreak of Sudden Acute Respiratory Syndrome (SARS). While many countries took measures to isolate SARS infected individuals, this is neither a practical nor an ethical option for responding to HIV<sup>25</sup>. Further, HIV is not as infectious as SARS or even tuberculosis<sup>26</sup>. However, what is clear is that migrants are more vulnerable to

<sup>23</sup> Nelson Mandela/HSRC Survey 2002

<sup>&</sup>lt;sup>22</sup> BW News Release

<sup>&</sup>lt;sup>24</sup> See for instance, Packard R 1989, White Plague, black labour...in Lurie

<sup>&</sup>lt;sup>25</sup> White 2003 BW

<sup>&</sup>lt;sup>26</sup> See Lurie's piece for the journal BW

HIV infection than people who do not move. This has been well documented both in southern Africa<sup>27</sup> and in other African countries<sup>28</sup>.

# The social economy of mobility and its impacts on HIV/AIDS

While the vulnerability of migrants may be high, "it is not the origin, or the destination of migration, but the social disruption which characterizes certain types of migration, which determines vulnerability to HIV"<sup>29</sup>. It is, instead, the social economy of mobility that creates complex and interconnected circumstances, which may lead to migrants' heightened vulnerability to HIV infection. For the southern African region, these have been identified, as:

- poverty and marginalisation;
- high rates of sexually transmitted disease and other opportunistic infection;
- differing strains of HIV;
- the presence or absence of male circumcision<sup>30</sup>;
- higher partner-change rates; and increasing contact with higher risk sex partners, such as commercial sex workers or clients<sup>31</sup>.

It is only by conceptually shifting focus from the physical act of movement and its association with HIV, that urban mangers can gain an understanding of the dynamics responsible for spreading the disease.

South Africa's HIV epidemic is primarily a heterosexual one spread by sexual contact. There is substantial evidence that migrancy plays a key role in the spread of sexually transmitted diseases, HIV and other opportunistic infections<sup>32</sup>. Migrant men are more likely than non-migrant men to have multiple sexual partners and to engage in high-risk sexual behaviour<sup>33</sup>. Evidence from India's HIV epidemic, where truck drivers and commercial sex workers, especially in towns on trucking routes, have the highest prevalence, constitutes a good illustration of this reality<sup>34</sup>.

In South Africa it has historically been easy to causally connect the prevalence of sexually transmitted disease to patterns of circular or oscillatory migration of mineworkers to and from rural areas. Many authors<sup>35</sup> have shown how sexually transmitted infections, such as syphilis, found their way through the migratory routes to rural South Africa where they were previously unknown. However, there is no easy way to discern such connections for the HIV epidemic primarily because it coincided with major socio-political changes in South Africa that made migration patterns more complex than ever.

<sup>&</sup>lt;sup>27</sup> Abdool Karim, 1992; Decosas, 1995; Gilgen *et al.*, 2001; Lurie, 2001

Kane et al., 1993; Nunn et al., 1995; Pison et al., 1993) (BW References Brummer Report

<sup>&</sup>lt;sup>29</sup> Decosas and Kane BW Year

<sup>30</sup> Williams et al 2003 BW SAMP

<sup>&</sup>lt;sup>31</sup> White 2003 What can we make of the association....BW.

<sup>&</sup>lt;sup>32</sup> Williams et al (2003), (see note 69 SAMP).

<sup>33</sup> Who infects who, 70 SAMP

<sup>34 (</sup>BW ref)

<sup>&</sup>lt;sup>35</sup> Jochelson (2001), Setel ????? (ARE YOU SURE ITS NOT SEFTEL) (1999) and Kark (1947) BW (85,86, 87),

The HIV/AIDS epidemic mostly affects those who are economically marginalised and politically disfranchised<sup>36</sup>. This works as a two-way relationship of cause and effect. Those who are poor are more vulnerable to opportunistic infections associated with AIDS and being ill with AIDS creates circumstances of impoverishment, thus generating a vicious cycle of disease. Migrants in cities form a part of the poorest of the poor, who are physically in the city but socially, institutionally and economically outside of it. This population hovers on the fringes of economic urban transition, outside of the structures of service delivery. This is why migrants become a group of concern.

In the case of migrants, high-risk conditions, created by their unique circumstances, make them especially vulnerable to exposure to the virus. Historically, this was particularly notable amongst migrant men working on mines. Lack of entertainment other than alcohol and sex<sup>37</sup>; isolation from family networks and appalling living conditions, created a breeding ground for various sexually transmitted diseases including HIV/AIDS. Today, the typical migrant does not necessarily fit the image of a mineworker: the migrant is no longer only an able-bodied male engaging in oscillatory migration but is increasingly female with a unique set of imperatives, facing different sorts of risks.

### Female migrancy

Female migrants are particularly vulnerable to HIV/AIDS because they might have to rely on sexual networking as a survival strategy. The project documenting mobility found that "in northern Tanzania, HIV incidence in migrant women was higher than in non-migrant women due to an increase in risky behaviour during the migration period, rather than pre-existing higher-risk behaviour." Campbell talks about the thriving commercial sex industry close to the South African gold mines, with women from rural areas within South Africa and neighbouring countries setting up shacks close to the mines that are considered 'hotspots' of sex work<sup>39</sup>. Zuma et al, in a study of risk factors for HIV infection among women in a township in Carletonville in southern Gauteng, found that migrant women were at a significantly higher risk of HIV infection than non-migrant women in the area<sup>40</sup>.

Poverty and cultural factors result in women's disempowerment to negotiate condom use. A woman asking to use a condom with her regular partner might be seen to be promiscuous and therefore subject to abuse. Transactional sex remains prominent among women in informal settlements, especially those who migrate for economic reasons. A survey conducted in August 2005 reported that girls as young as 16 were exchanging sexual favours for survival or for gifts they themselves cannot afford. For young school-going girls it may be peer pressure that makes them engage in sexual networking. As one respondent pointed out: "When a young girl goes to school and looks

<sup>&</sup>lt;sup>36</sup> BW Barnett and Whiteside ???

<sup>37</sup> Campbell BW

<sup>38</sup> BW Date

<sup>&</sup>lt;sup>39</sup> 2000 BW

<sup>&</sup>lt;sup>40</sup> 2003 BW

at her friend wearing new shoes, she also wants them. So she ends up making boyfriends who will buy her nice gifts. It's a 'Triple C Man' - a man with cell phone, car and cash - who is most desirable."

The same survey found that many adult women who do not identify themselves as commercial sex workers take on multiple partners as a way of survival for themselves and their children. In such relationships the woman's control over condom use by her partner is minimal. One organisation reported female condoms were also unpopular as were difficult to use, were visible and were reported as being too noisy during sex. Similar trends were reported for Botshabelo, an industrial node in Mangaung. The factory owners (reported by respondents in Botshabelo as 'mostly Chinese looking') were seen to be having multiple relationships with the women residing in Botshabelo. Interviewees suggested that condom use in these relationships was probably low and consequently the risk of HIV transmission quite high as there were many instances of mixed race babies of single mothers.

In Mangaung there was a perception that commercial sex workers had increased over the last few years and were identified as a group at high risk. It could not be established with certainty where these women were coming from or whether they had always lived in Mangaung. Bloemfontein's central location in the country on the N1, N6 and N8 corridors place the city on a major trucking route, with large numbers of truck drivers serving as clients for the commercial sex industry services. This creates high potential for HIV transmission.

Migrant women from rural areas who are engaged in other informal livelihoods may also engage in transactional sex, but do not identify themselves as sex workers<sup>41</sup>. Transactional sex is not seen in the same light as commercial sex work but is identified with 'sex for money', especially in the context of sub-Saharan Africa, and can take many different forms. "[S]ex can be exchanged for drinks, food, or a non-specific amount of money, and the sex-for-money relationship can be for one night or more long-lasting"<sup>42</sup>.

It is because the informal sector in which many of the migrant women participate is so physically and economically insecure that migrant women are forced to engage in transactional sex as a survival strategy. The gender inequalities that prevail within the migration context often means that migrant women, especially cross border informal traders, may be sexually harassed or even raped by border officials, truckers or taxi drivers<sup>43</sup>. It is highly possible that refugee women have experienced sexual violence during flight. Condom use is low or rare in such encounters and the likelihood of HIV transmission is high.

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<sup>&</sup>lt;sup>41</sup> Chitra BW eforum

<sup>&</sup>lt;sup>42</sup> Wojcicki (2002 BW)

<sup>&</sup>lt;sup>43</sup> BW IOM

### The relationship between migrancy and health

The relationship between migration and health is neither simple nor simply negative. In many rural areas, remittances from labour migration have been a key source of income. Data from Agincourt DHS<sup>44</sup> site shows that temporary migration is positively associated with economic status. A member of a "high economic status" household is substantially more likely to be a temporary migrant<sup>45</sup>. This could be due to the fact that increased income due to migrancy results in a higher socioeconomic status for rural households with links to the city. This could mean higher affordability of health services, better nutrition, better sanitation and better access to education for those who stayed, despite the spatial division of the household.

This situation is particularly complex where young children are involved. For instance, the net effect of female migration on children can be positive where the absent mother can find social networks to cater for childcare<sup>46</sup>. When such networks are lacking, it could mean neglect for the children of migrant mothers. A study of child survival in the Bushbuckridge area, in Mpumalanga showed that the temporary female migration status of the mother did not increase the children's mortality risk. "In fact there was a small protection effect afforded by a mother being a temporary migrant."<sup>47</sup> While this study would seem to suggest that kinship ties are still strong in this rural region, it cannot be assumed that this trend will continue as AIDS deaths amongst adults increase, social cohesion decreases and the households become increasingly strained with the emerging mortality in young income earning adults.

However, better health for the children of migrants may not necessarily translate into better health for migrants themselves. Although migrants believe that they will have better access to health services and other infrastructure in cities, this may not be the case in the informal settlements that only nominally part of the city, and where migrants are likely to live. Even if health services are better than in rural areas, the added pressures of survival in the face of low labour absorption may negatively affect the health of migrants. Mortality among the poor may persist or even get worse in urban slums.

While rural-urban migration is an important cause of spread in the beginning of the HIV epidemic, it is rural-rural migration that is the key to the further spread in mature epidemics like South Africa<sup>48</sup>. With different forms of rural-rural migration becoming prevalent in South Africa and even rural-urban migration taking place in step-wise flows,

<sup>&</sup>lt;sup>44</sup> The Agincourt sub-district, comprising 21 villages with a population of slightly under 70 000, is situated in the Bushbuckridge district of South Africa's rural north-east, adjacent to the country's border with Mozambique. More than a quarter of the population (29%) are of Mozambican origin (Collinson et al 2003). Labour migration is the most predominant livelihood strategy as local employment opportunities are few. While 16% of the households in 2001 had at least one member who had made a permanent move outside of the site, 55% of the households contained at least one temporary migrant, signalling high levels of circular migration (Collinson et al 2003, Kahn et al 2003 BW).

<sup>&</sup>lt;sup>45</sup> Kahn et al 2003, Collinson et al 2003 BW

<sup>&</sup>lt;sup>46</sup> Kahn (2003)

<sup>&</sup>lt;sup>47</sup> OR: 0.84; 95% CI: 0.69 -1.03) (Collinson, MSc(Med) thesis in Kahn 2003).

<sup>&</sup>lt;sup>48</sup> Mobility Project BW

migration streams and patterns become crucial in conceptualising prevention and treatment efforts. Indeed in the context of HIV/AIDS treatment and anti-retroviral rollouts, it is premature to say whether migration to urban areas will result in worse health outcomes or result in more migration in order to access life-saving drugs. An answer to this requires an analysis of how the roll-out is taking place, the urban-rural differential in accessing anti-retrovirals, and whether or not it is economically and socially feasible for an individual or a household to move to a city to access AIDS treatment.

### **HIV** induced migration

HIV induced migration is manifest in three migratory patterns:

- people returning home to die;
- people moving to access health services; and
- the migration of children in AIDS affected families.

Researchers have only recently begun to shift their attention to understanding these new forms of migration, with the result that it is not possible to give an accurate answer to the extent of the prevalence of these trends in South Africa. In the absence of conclusive national data, regional studies within South Africa or in the similar settings of other SADAC countries have been used to gain an understanding of these trends.

### 'Going home to die'

There is a growing concern about urban migrants returning home to convalesce and, in many cases, to die. People who fall sick with AIDS require high levels of care compelling patients to changing their living arrangements at critical stages of the illness. The debilitating effect of AIDS also results in the inability to work, and hence to pay for urban expenses. Coupled with this is stigmatization from the community. A less noticed aspect is the loss of dignity when services such as water and sanitation are absent, making it difficult to cope with AIDS-induced symptoms, such as serious diarrhoea<sup>49</sup>. Even in the fairly immobile population of the United States, research found that 10% of the HIV+ people change their place of residence before they die, over half of them moving to another state<sup>50</sup>. A study in Thailand showed extensive return migration to parental homes by people living with AIDS, mostly in the final stages of their illness, and hence dying within a few months of their return. Research in Uganda and Zimbabwe showed the increasing role of older parents in taking care of adult children inflicted with AIDS<sup>51</sup>.

In the context of South Africa, where circular migration is prevalent, where links to rural homes are maintained by households who make permanent moves, and where the tradition of being buried in one's ancestral home is strong, this phenomenon is likely to be rife<sup>52</sup>. A study of Mpumalanga Township near Durban, talks of rural areas "as a 'hide

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<sup>&</sup>lt;sup>49</sup> BW Kathy Eales Study <sup>50</sup> BW IOM Paper

<sup>&</sup>lt;sup>51</sup> Ntozi and Nakayiwa 1999, Williams and Tumwekwase 1999 BW Thai paper and see other references

<sup>&</sup>lt;sup>52</sup> BW Ask Cecil: ancestral home

away' or final resting places for people dying of AIDS"<sup>53</sup>. A mother migrating to her rural home with her critically ill daughter describes the process:

"Lindiwe has been living with the evil disease for the past four years. Her daughter passed away when she was only 6 months old. Her only sources of support are myself, the church, and an AIDS organisation she joined two years ago. It saddens me to see how the community is not being supportive of my family and many other families in the Mpumalanga. Even our neighbours are not talking to us anymore. All her friends have turned their back against her. At the end of the month, I am taking her home, where I was born- Eshowe. My aunt will nurse her where she might recover or will die peacefully and with dignity." <sup>54</sup>

A series of interviews undertaken in August 2005 confirmed that many people who had become very sick were likely to return to their rural homes. This is much more likely in the case of recent migrants, whose ties to rural areas are still relatively close, but less likely if a patient is on treatment and hopes to recover. Among people who are terminally ill and having strong links with rural homelands, there is a strong tendency to go back home before they die, especially since the cost and trouble of transporting a dead body would be more onerous. Although this phenomenon is not unique to those sick with AIDS, the effects of the disease creates more of an imperative to move.

In the August 2005 interviews, many non-governmental organisations and faith-based organisations confirmed that there was substantial increase in young people returning to their parental homes when they were terminally sick. Interviews in Mangaung for example revealed that while many factories are shutting down in Botshabelo, the funeral parlours were a "booming" business. More graves had been added to the cemetery in the past few years, at a much more rapid rate than before. Respondents said that there was literally a funeral every second Saturday, if not every Saturday and parents were outliving their children. Many of those returning were coming back from mines when they were very sick. Respondents reported that no one would say that the cause of death was HIV/AIDS but the symptoms and the high rates of younger people dying were a good indication that there was a high HIV/AIDS related mortality.

The interviews also confirmed that people do not simple move to die in rural communities but also to seek care. This is particularly significant because the effects of HIV/AIDS are so devastating, including body wasting, diarrhoea, inability eat as well as mental isolation in urban settings due to lack of social capital.

While rural familial ties may be seen as sites of stability and refuge, the migration undertaken by a person living with AIDS also has economic consequences for the families where the person moves. One must also be careful not to assume that the stigma in the rural communities where migrants move is necessarily less than in the urban settlements where the migrant previously lived. While the AIDS-infected migrant

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<sup>&</sup>lt;sup>53</sup> Mosoetsa, 2004 BW

<sup>&</sup>lt;sup>54</sup> Mosoetsa 2004, Interview 10, 29th November 2004

may move to escape stigma in his or her urban community, the infected individual's family might face similar stigmatisation from the rural community. This could result in the further dislocation of the individual and hence in multiple moves involving other family members moving to perform care-giving roles.

The Agincourt DHS site is one of the first to undertake careful study and documentation of this phenomenon in South Africa through verbal autopsies. During the past decade the site has seen a rise in AIDS-related mortality and in-migration. Such in-migration has led to "excess" adult mortality in this rural site. "Excess in the sense that there is more death at less advanced ages than the risk factors and exposure in the rural area would produce on their own" Analysis showed that "the odds of dying for returning men between the ages of 20 and 60 are between 1.5 and 2 times greater than resident men in that age group, with greater differences in most recent years when HIV prevalence is highest; women experience similar but muted effects." <sup>56</sup>

Table 10 below describes the overall trend in the number of adult deaths as a result of HIV and TB<sup>57</sup>. For both females and males the fraction of total deaths in the age groups 20-39 and 40-59 attributable to HIV and TB show marked increases.

Table 11: Trends in adult TB and HIV deaths (de jure population)

	1992-1997		1998-2002	
Age	Number of deaths	Percent of total deaths in age group	Number of deaths	Percent of total deaths in age groups
Female				
20-39	29	22.83	203	52.86
40-59	10	9.26	73	27.44
Male				
20-39	34	17.62	161	42.59
40-59	48	19.83	130	36.41

### Moving in search of better services

While the search for employment is without a doubt the most important reason driving migration towards cities, the qualitative difference in service delivery between urban and rural areas is increasingly influencing migration decisions. This can affect both individuals infected with HIV/AIDS and households where one or member is ill. As a study in the Free State shows, households or families affected by AIDS often reallocate household labour for decreasing costs, generating income and performing care-giving

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<sup>(</sup>Clark 2005 BW) "Discrete time event history analysis is used to quantify the additional risk of dying faced by circular migrants who have recently returned to the rural area" (Clark et al, 2005b BW Abstract)
(Clark et al 2005b BW Abstract).

<sup>&</sup>lt;sup>57</sup> abstract of a study by Clark et al (2005) that is pending publication

roles.<sup>58</sup> The results of this study shows that mortality in a household increases the probability of out-migration and affected households have a higher probability of out-migration than those who are not affected. Such moves are taking place in a context where many HIV-infected individuals are ignorant of their status. However, the assumption that moves are made in search of better health services is only relevant when awareness of HIV status is assumed. "As self knowledge of infected status becomes more current - as will probably be the case in the South African HIV+ community during the next five years - the effect on migration decisions will increase, potentially dramatically"<sup>59</sup>. This is likely to further fuel migration of people to urban places and certain metropolitan areas to access better health services.

A series of interviews conducted in August 2005<sup>60</sup> confirmed that although most migrants moved to access better economic opportunities, the desire to access better health services, particularly in the context of HIV/AIDS was a significant reason for respondents. Anecdotal evidence from the service providers that were interviewed suggests that accessing health, and more importantly accessing HIV/AIDS relation service provision was a motivator of migration. The following trends seem significant:

- (a) Migration taken by pregnant women to access PMTCT services: This can be temporary or longer term in nature depending upon whether or not the mother is found to be HIV positive. If found positive, the women either migrate temporarily to access ARVs when they fall sick (going back once they have been stabilised and then returning every three months) or become commuters to access ARVs.
- (b) Migration undertaken in order to access ARV treatment by both men and women. This is especially prevalent if the waiting list in their home area is too long, or due to the reputation of a particular hospital. The latter was pointed by medical professionals at a few tertiary hospitals to whom patients gave this reason: Uptake of VCT as well as ARV services seems to be higher in many clinics and hospitals, although this differs with respect to the location of the health facility. For instance, a clinic run by an organisation called Sino Sizo in eThekweni sees mostly migrant men working on farms while the King Edward hospital reported the balance being skewed in favour of women.
- (c) Forced migration of people who are thrown out of their families on disclosure of their HIV positive status. This seems to be especially the case for women who are told to leave by their husbands or even their own families. Respondents also mentioned cases where the neighbours of a community were unwilling to let HIV positive individuals stay in the locality, especially in informal settlements and rural areas.
- (d) Voluntary movements away from home. Although this phenomenon cannot be classified as migration, it certainly indicated conditions of increased mobility undertaken by individuals who tested HIV positive. Firstly, people try to go to a distant location to get tested for HIV rather than a clinic closer to where they live or work. Secondly, if tested positive they move around from one VCT service to

<sup>59</sup> Bekker 2002 BW Western Cape Main Study

<sup>&</sup>lt;sup>58</sup> Booysen (2003a BW)

<sup>&</sup>lt;sup>60</sup> A little bit about your methodology, Gayatri?????

another in order to confirm and reconfirm their test result. Finally, they also try to access ARV treatment at far away as possible, where they can be sure that the chances of meeting someone they know will be remote. This last trend, however, cannot be generalised as it also depends on the level of stigma existent in the person's community, level of awareness messages being spread, length of time ARVs have been available as well as the success of the programme being run in that community.

### Migrant awareness and attitudes

The August 2005 survey of service providers dealing with HIV/AIDS found that the level of HIV awareness in migrants ranged from low to non existent, and was subject to a range of misconceptions. Many migrants feel that HIV is their lot (especially women) and face high level of stigma in their community as well as from their partners and close family members. Others believe that HIV is a punishment from God and feel guilt and anger. Such stigmas force many to migrate to another part of the city or to another city altogether. This was notable in the three metros that were studied (WHAT THREE METROS???). Many people denied being HIV positive as well as being at-risk to the infection. Some organisations reported that they faced many challenges in the communities in which they work in persuading migrants to attend HIV/AIDS workshops, join support groups or listen to health talks. Encouraging people to come for Voluntary Testing and Counselling "has been an uphill task". Even when people do come forward, they generally tend not to go to a site close to their place of residence or work. Women stay at the receiving end of stigma and discrimination as they tend to get blamed for transmission of the virus and subject to domestic violence, especially on disclosure of their status. This is illustrated by an anecdote recounted by a service provider in Cape Town:

"There was a case recently where we were asked to provide support and intervene. One of our clients disclosed to her husband that she was HIV positive and suggested that he should get tested too. The man consequently put a knife through the woman's body. She survived and he was arrested but now she wants the husband to be released. We tried to reason with her but she said that if her husband was in jail who would feed her children?"

A service provider n eThekwini tells a similar story:

"When I started working here I saw many cases of stigma towards women who were HIV positive. Once we went to a rural part of eThekweni in a mobile clinic and were told of this incident. One of the young girls found out that she was HIV positive and she told her family of her status. Her father was furious with her and threw her out of the house on the street. We intervened and finally the mother accepted but the father never could. Then there was this other case when a woman had told her husband that she was HIV positive. He beat her up and threw her out of the house. When she went back to her family in rural area she was locked in a hut by her family who would just push the food into the hut..."

In Johannesburg, similar problems are common

"As a doctor, I see incidents of women being abused all the time when they disclose their status. To put people on ARVs we encourage (initially we used to insist) that they at least disclose it to someone close, preferably their partner so that the get support during the treatment as this increases the chances of adherence. But a lot of women were being driven out of their houses with the children and this made them even more vulnerable. Many times these women would never come back and that is a big problem. Now we have stopped insisting on disclosure to their partners bit this is very tricky."

NGOs working with refugees and asylum seekers commented that their clients generally saw themselves at a low risk of HIV/AIDS as compared to the South Africans. However, in the last three to five years there was an increasing level of concern due to a higher number of deaths related to HIV/AIDS. Generally the level of HIV/AIDS awareness among and asylum seekers seems to be generally low. Denial and stigma are as prominent as in their South African counterparts and the uptake of VCT is very low. More recently, the United Nations High Commission for Refugees has taken on the role of a facilitator to raise the level of HIV awareness among refugees and asylum seekers as well as support refugees' access to anti-retrovirals.

The following excerpts from a conversation with a person employed in a faith based organisation working with refugees, illustrate the dangerous misconceptions about HIV/AIDS:

"Refugees and asylum seekers who come here don't want to talk much about HIV. They say it's a killer disease but the concerns of rental and food take over any discussion. They don't take HIV as a concern because there are many other competing circumstances..."

"Before I go for sex, I make sure that I drink lots of warm lemon seasoned water so that immediately after sex I will be able to urinate, and thus reduce the risk of being infected. I do it even when I have used a condom. Meanwhile the woman remains the receiver and it would be possible for her to do the same strategy I use".

Similarly a service provider working with refugees in eThekweni reports:

"Everybody is at high risk but refugees might be more exposed. Because of mobility, they end up with multiple sex partners and because of their living conditions (overcrowding) they share partners. Women are particularly at a higher risk; single mothers and young girls engage in transactional sex to make a living and like other women in families are not in a position to negotiate safe sex with partners"

"I don't think we service providers are doing enough with respect to HIV services for refugees and asylum seekers. We could do more. They are not a big group of concern for local government. As far as AIDS deaths are concerned, it is not yet a big concern. But at the same time these people are at risk. Young people are away from their families, away from all the codes of conduct in their home countries and

in the meantime, sex is very easily available here. Also, when one feels isolated one tends to use more alcohol and engage in risky behaviour."

It is notable that more men that women are informed about their HIV status. Data from selected Cape Town city clinics illustrate that significantly more women underwent Voluntary Counselling and Testing (VCT), and that they were mainly referred by medical doctors<sup>61</sup>. This 'feminisation of VCT' maybe one of the factors contributing to a wider process that is being observed in South Africa - the 'feminisation of migration.'

1400 Number attending 1200 1000 800 600 400 200 Jun-03 Jan-03 Feb-03 Mar-03 Apr-03 May-03 Jul-03 Aug-03 Sep-03 Month

Figure 6: Number of males and females attending Voluntary Counselling and Testing clinics in Khayelitsha, Cape Town January to September 2003

Interestingly, a majority of people attending the clinics seemed to be seeking services other than Mother to Child Transmission Prevention and tuberculosis, with the demand for other services being substantially higher in February and March of the particular year.

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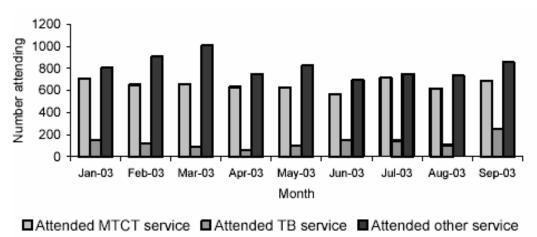


Figure 7: Those attending Voluntary Counselling and Testing clinics in Khayelitsha, Cape Town by type of service they attended

<sup>61</sup> Ndegwa et al 2004

A consistent finding that emerged from the survey undertaken in August 2000 across all cities was that more women than men access HIV related services. This confirmed the finding of the literature based review. While PMTCT is a directed at women, the uptake of VCTs as well as ARVs is higher for women than for men, except where the programmes are directed at male migrants. Many reasons were given for this:

- (a) Reproductive health has historically had a women focussed approach and many women have the opportunity to get tested. Men seem to have been left out of reproductive health programmes that afford an opportunity to get HIV awareness messages across.
- (b) Women are also predominantly responsible for the health of their children and tend to come to the hospital more often, hence increasing the chances of becoming more aware HIV services and messages.
- (c) Men are being missed by HIV awareness campaigns. Many campaigns take place during the day when men may be at work, with the exception of workplace awareness campaigns, which are not consistent, if they take place at all.
- (d) Anecdotal evidence suggests a higher level of denial in men than in women.
- (e) Men were also reported to be more likely to access curative rather than preventive health services. As a medical professional in Cape Town commented, "Males feel intimidated when they come here and they hardly find other men. Moreover men prefer to go to private medical practitioners and traditional healers. They always want a quick-fix."
- (f) Finally, medical practitioners were of the view that men's health seeking behaviour differs from that of women in that they are likely to ignore ill health for as long as possible.

### Failure of prevention

Respondents in the survey of HIV/AIDS service providers that was undertaken in August 2005 felt that the various programmes aimed at preventing HIV/AIDS were not working with the exception of local government in Mangaung. All government interviewees felt that while a lot was being done at the government level to promote prevention such as providing condoms and creating awareness, there was doubt about the effectiveness of these interventions. Civil society organisations also felt that while prevention campaigns were taking place, the extent to which they were successful was questionable. Medical practitioners involved in HIV related service provision, especially in ARV roll out were perhaps the most cynical about the efficacy of prevention programmes and almost all insisted that they did not see behaviour change taking place in their patients or in the migrant communities that they serve.

This study found that two possible reasons for the failure of the prevention programmes:

- that the prevention messages are not reaching certain communities in a consistent manner, especially the migrant communities; and
- that knowledge about HIV does not necessarily translate into perception of risk and/or behaviour change.

While the awareness campaigns and condom promotions are taking place in all the cities that were surveyed<sup>62</sup>, these were reported to be on an ad-hoc basis rather than in a more consistent and organised manner, especially in refugee communities and in the informal settlements where most migrants tend to stay. One of the respondents working for a non-governmental organisation in Mangaung who was living in an informal settlement that housed a lot of migrants, explained the situation in her area as follows:

"The youth in our settlements, especially coming from rural areas, don't know anything about how you contract HIV. Some know about it but are in denial. Others accept that there is HIV but wont go to VCT or care about prevention because they say that you could get raped and get it anyway. Then there is 'muti' that people believe in. Men think that condoms are a waste of time. There are a lot of teenage pregnancies in such settlements. It is considered a woman's responsibility not to fall pregnant and so the men don't care about condoms. Prevention programs are not working. Many time these prevention campaigns are a once off or even a yearly thing. What is needed is regular messages, because understanding the risks as well as changing behaviours is a process. In these squatter camps you can get condoms at the clinics but clinics are too far. Sometimes they come to distribute condoms but not on a regular basis. I sometimes take a box myself and just go and give to my neighbours but that's not like a routine thing. I don't think there are free condoms in spaza shops and shebeens as there should be. And then even when condoms are distributed I find children playing with them in the street!"

Working with refugee and asylum seeker population has proved to be even more difficult since these communities tend to remain hidden and do not always participate in community-based programmes. The promotion material is not easily available in the languages spoken and understood by these groups.

All organisations interviewed in August 2005 thought that prevention programmes were not bringing about appropriate behaviour change and that more creative strategies should be employed. Service providers interviewed believed that people were tired of hearing about HIV and condoms, especially when the risks were not internalised and because the effects of the infection were not visible for many years. They felt that the prevention campaigns needed to focus on other related issues like sexually transmitted infections with which people were familiar. Then, once the campaigners had peoples' attention, it was possible to proceed with HIV education. They felt that HIV has become a 'stand alone problem' and not as a reproductive health issue. Also approaching HIV from a rights-based perspective of empowering communities, especially women, seemed to attract more listeners.

Exclusion of men from reproductive health programmes was also identified as detrimental to HIV prevention.

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<sup>62</sup> Which cities???

While increased female migration<sup>63</sup> has generated a hypothesis regarding the breakdown of tradition patriarchal control structures<sup>64</sup>, there may be something more that is being overlooked. If women are more likely to be amenable to finding out their HIV status, as the data above indicates, they may also be more likely to undertake migration to access better health services.

Indeed access to health services was one of the reasons listed for moving to cities in a survey carried out by Cloete in 2002 in the Western Cape. This is illustrated in Table 10. Of all the infrastructural services that attracted people in the sample survey to cities, health tops the list<sup>65</sup>. Health services were regarded as a potential reason to move by 35% of all Coloured respondents, 20% of Whites, and 70% of Africans. This was highest amongst the African rural population at 78%. Migration in search of better services is not independent of migration undertaken to seek better employment. On the other hand, if levels of migration are quite high, then the number of potential patients in the migration streams will also be high. Cloete states: "It is clear accordingly that demand for state health services will rise in the province as migrating households enter the province. The question remains whether patients are entering the province *specifically* to seek out better health services." <sup>66</sup>

Table 12: Infrastructural services in relation to potential on-migration, by population group and sub-region

	COLOU	RED		AFRICAN	ı		WHITE		
Would you	Total	Metro	Non	Total	Metro	Non	Total	Metro	Non
move	reply	urban	metro	reply	urban	metro	reply	urban	metro
again to	ýes		rural	ýes		rural	ýes		rural
obtain?									
Better jobs	32	27	56	80	82	70	34	34	34
Housing	46	43	59	83	84	81	44	46	33
General	39	36	54	79	81	77	32	36	28
services									
Health	35	32	51	70	68	78	20	19	24
Transport	25	21	45	58	55	74	17	16	19
Schools	31	28	48	57	54	71	14	15	12
Water	12	7	34	44	39	71	9	10	8
Peace	42	43	38	68	66	76	25	29	18
N=	384	155	229	204	68	136	232	97	135

The same study shows that people in rural areas were generally dissatisfied with local health facilities, leading the author to conclude that this may have already been factored into migration decisions<sup>67</sup>. It is then reasonable to assume that this factor will become

<sup>&</sup>lt;sup>63</sup> Booysen 2003 a BW

<sup>&</sup>lt;sup>64</sup> Posel BW on Feminisation

<sup>&</sup>lt;sup>65</sup> BW See Table

<sup>&</sup>lt;sup>66</sup> Cloete 2002

<sup>&</sup>lt;sup>67</sup> Western Cape Study by Cloete (2002)

increasingly important as knowledge of HIV status increases and access to antiretrovirals increases. Given that travelling long distances simply to access health services is generally prohibitive for poor people, the rural poor are likely to want to locate closer to sites of anti-retroviral roll-out. At the same time, this study also found that the clinics in the informal settlements of the Western Cape are overwhelmed and lack the infrastructure to cope with current demands. Despite this, coming to metros still has the relative advantage of obtaining access to facilities over and above those available in rural areas. Understanding post-diagnosis migration will be important in allocating appropriate response and care facilities and services at the destination areas<sup>68</sup>.

# **Children's migration**

Very little is known about the situation of children in HIV/AIDS affected households. Even less is known about their coping strategies. However, children are a key vulnerable group. Substantial numbers contract the disease from their mothers and die at a young age or during birth. Table 12 shows projected infant and under-five mortality rates for 2010 in the presence and in the absence of HIV/AIDS.

Table 13: Projected infant and under-five mortality rates

Projections for 2010 (Deaths per 1000 live births)	With AIDS	Without AIDS
Infant Mortality	48	35
Under-five Mortality	62.6	43

Rhele and Shisana (2003)

Older children are likely to grow up as maternal or paternal orphans (or both), with little support and guidance. This in turn could lower the age of sexual debuts and contribute to risky sexual behaviour. While this is likely to fuel HIV/AIDS infection, children in HIV/AIDS affected families are also likely to be compelled to move. This movement takes three forms:

- children's migration in response to low household resources due to sickness;
- children's migration to help sick relatives; and
- children's migration after the death of both parents.

Ansell and Blerk<sup>69</sup> identify three criteria that contribute to decisions made by family members concerning children's AIDS-related migration in all three cases:

- Who is responsible for the children;
- Whether a particular household can meet the children's needs;
- Whether a household might usefully employ the child's capacities.

<sup>&</sup>lt;sup>68</sup> Booysen 2003 a BW in Nedegwa

<sup>&</sup>lt;sup>69</sup> Ansell and Blerk (2004)

However, the decisions are never completely rational and are "highly influenced by emotional attachment and a sense of moral obligation"<sup>70</sup>. Although children are not actively involved in the initial decision making phases of where they will be sent, they may have influence and may engage in further migration on their own, if dissatisfied with their circumstances in the new household<sup>71</sup>. Further migration would probably be most significant in the case of children whose parents have both died.

Adults with AIDS can face debilitating illnesses over months or years reducing their capacity to generate income. The high cost of caring combined with reduced income diminishes the capacity of the household to care for children<sup>72</sup>. In order to address these problems, children are often sent away to live with relatives. This decreases the economic burden of the household that no longer has to spend its dwindling resources on one more child. On the other hand, the help of children may be enlisted to take care of AIDS-sick adults. While care-giving roles have traditionally been assigned to adults, with children only being used as a last resort<sup>73</sup>, the weight of AIDS may be shifting this balance. Children are increasingly being sent to help sick relatives or households where an adult, especially the woman, has passed away. Research in Malawi and Lesotho shows that this work is often gendered<sup>74</sup>. Boys are more in demand for outdoor labour such as herding, agriculture and gardening - while girls are required for household work.

Migration related to caring is usually short term and, particularly in the case of AIDSrelated illness, may terminate when the relative passes away<sup>75</sup>. Although girls are more likely to be carers, boys may also be involved, especially when the recipient is male 76. Results of a study carried out for selected households in nine South African provinces show that an overwhelming majority - 73.6% - of respondents living with HIV/AIDS believe that if they pass away, their relatives will take care of the minors in the family<sup>77</sup>

However, when both parents die, relatives may not always be willing or able to take care of the children, which may result in child-headed households<sup>78</sup>. Parents were uncertain about the future care, accommodation and education of their children, but, at the same time, they regarded the support of the family as crucial in the absence of other options. The study also found that 5% of the households in their sample were child-headed, 7.5% were headed by grandparents and 25% were headed by a single parent<sup>79</sup>. Because many urban children in Southern Africa now live in nuclear family units – as opposed to extended families, the household is dissolved upon the death of the parent (or grandparent). The children move to live with relatives, are occasionally joined by an adult at their place of residence, or form child-headed households.

<sup>&</sup>lt;sup>70</sup> Ansell and Blerk 2004

<sup>&</sup>lt;sup>71</sup> Ansell and Young 2004 note 38 BW

<sup>&</sup>lt;sup>72</sup> Ansell and Blerk, 2004

<sup>&</sup>lt;sup>73</sup> Robson and Ansell BW 44

<sup>&</sup>lt;sup>74</sup> Ansell and Blerk (2004)

<sup>75</sup> Ansell and Blerk 2004

<sup>&</sup>lt;sup>76</sup> Ansell and Young BW

<sup>77</sup> Khayamandi (2002)

<sup>&</sup>lt;sup>78</sup> Khayamandi 2002, Ansell and Blerk 2004

<sup>&</sup>lt;sup>79</sup> Ansel and Blerk (2004)

Table 14: Future plans for minors (BW)

Province										
	Eastern Cape	Western Cape	Northern Cape	Gauteng Province	KwaZulu Natal	Mpumalanga	Northern Province	North West	Free State	SA (%)
COUNT	301	86	34	216	260	104	171	172	113	1457
No plans	5.3	17.4	0.0	12.0	13.1	5.8	19.3	46.5	6.2	14.9
Relatives will take										
care	84.7	70.9	73.5	80.1	67.7	82.7	73.7	46.5	80.5	73.6
Care center of orphanage	2.7	1.2	14.7	6.0	8.5	4.8	5.8	5.8	8.8	5.8
Charity organisations should take care	0.3	3.5	0.0	0.0	0.8	5.8	0.0	0.0	0.0	0.8
Welfare department of government must										
take care	6.6	2.3	8.8	1.9	8.8	1.0	1.2	1.2	4.4	4.3
Other	0.3	4.7	2.9	0.0	0.8	0.0	0.0	0.0	0.0	0.5
TOTAL	100	100	100	100	100	100	100	100	100	100

While some children refuse to move in order in order to hold on to their homes, very few manage to retain the ownership for long and eventually have to move. Yet there are no guarantees that these orphans will be readily welcomed in their new households. A lack of supportive familial ties, difficulties in living with the adoptive family, or economic difficulties experienced by the adoptive family may force the orphans to move again either to another family or, in some cases, onto the streets. They might also be compelled to engage in various forms of child labour. Children, especially girls, may be married off at an early age since marriage not only secures a permanent shelter for them, but also provides the families with some economic benefit in the form of 'lobola'.

Both physical and psychological vulnerability is caused by these forms of migration, often involving multiple moves. The pressures of dealing with immediate survival are so strong, that psychological needs such as love and emotional support are often overlooked. Children whose parents have died of AIDS may also be stigmatised. Multiple moves disrupt children's education, as do early marriages. Child labour, whether undertaken by orphans as a survival strategy or by children to support an AIDS-affected family, can be demanding, exploitative or even dangerous. Children living on the streets or heading a household might be susceptible to economic and social insecurity, physical and sexual violence, malnutrition, risky sexual behaviour, and to becoming the targets of criminal syndicates<sup>80</sup>.

<sup>&</sup>lt;sup>80</sup> BW child trafficking report/ IOM trafficking report

A survey of HIV/AIDS service providers in ?? cities undertaken in August 2005, revealed that child headed families existed in each of the cities visited. However this phenomenon was most pronounced in the Mangaung municipality. Due to a decline in social capital and increased financial constraints on the kin, children were left to take care of their younger siblings when both parents died. Anecdotal evidence suggests that most of these deaths were probably due to HIV/AIDS since parents were dying at a very young age. The head of a household in such cases could be as young as 14 years of age taking care of even younger siblings. The phenomenon is so widespread that a new terminology has emerged to describe children responsible for heading households: in Botshabello, children living alone or heading a household, have become known as 'Mpintshis', meaning 'young people who are active'.

Many of these families are assisted by social workers but the access to social grants is hindered by lack of ID documents or birth certificates. This was not only the case in Mangaung but also the adjoining town of Ladybrand from where many migrants into Mangaung originate. These children seem to be in particularly vulnerable circumstances. In many instances relatives are only interested in assuming guardianship to the child welfare payments granted to these children. This often results is a lack of care of the foster children. Children either run away or engage in risky practices like drug abuse, transactional sex (amongst girls as young as 13 or 14). These practices place the children at a higher risk to HIV.

As developmental processes take hold in South Africa, migration is likely to increase rather than reduce in the coming years, although its composition and nature may change. Hence, it is important that "development or poverty reduction programmes do not aim to reduce migration for its own sake, or see reduction of migration as an indicator of success" This suggests that new thinking about migration and its associated challenges is required.

### CHAPTER 5: THE NATURE OF THE DISEASE

The progression from HIV infection to the onset of "full-blown" AIDS, then to death and later to household reconfiguration is a complex one, with different consequences for households – and consequently for urban managers - at different stages of the disease.

An individual infected by HIV will initially experience glandular fever-like symptoms that last a few weeks. During this time, the so-called 'window period', an individual will test negative for HIV on antibody tests. It is only after the individual has seroconverted – that is, started to produce antibodies to the virus - typically three to four weeks after the initial infection, that these tests will yield positive results.

<sup>81 (</sup>de Haan 2000 BW Migrants livelihood)

Following the passing of these initial symptoms, the individual enters a prolonged asymptomatic phase, which typically lasts four to six years. The individual then starts to experience symptoms such as weight loss, diarrhoea and oral infections. Finally, when the individual's immune system has been severely weakened by the HIV infection, opportunistic infections, such as Kaposi's sarcoma and pneumonia, set in. These are regarded as being defining of AIDS. The term 'AIDS' thus refers to a range of conditions that are diagnosed in the late stages of HIV infection. In the absence of treatment, the individual typically dies within 1 to 2 years of the initial AIDS-defining illness.

A number of laboratory tests have been used to determine the prognosis of people infected with HIV. The two tests that are most predictive of progression to AIDS and death are the CD4+ lymphocyte count and the viral load test.

The CD4+ count is a measure of the degree of immune suppression. An uninfected individual would typically have a CD4+ count above 800 cells per mm³, while an individual experiencing AIDS would usually have a CD4+ count below 200. The viral load is a measure of the concentration of HIV in the body, and can be thought of as determining the rate of decline in the CD4+ count. Viral load levels tend to be high at the time of seroconversion, and then fall gradually, rising again about two years after initial infection. The viral load test is important not only as a prognostic marker, but also as a measure of an individual's infectiousness; individuals with high viral loads are most likely to transmit HIV.<sup>82</sup>

The CD4 count predicts the risk of opportunistic infections and is used to determine the need for prophylactic therapy and the initiation of antiretroviral therapy.<sup>83</sup>

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<sup>&</sup>lt;sup>82</sup> Johnson (2003, no page no. provided).

<sup>&</sup>lt;sup>83</sup> Handbook of HIV Medicine (2002, p. 55)

CD 4 count ----- Viral load **Acute HIV** Death log<sub>10</sub>6 syndrome **Opportunistic** 1000 disease CD-4 (cells/µl) **Constitutional** 600 symptons Clinical latency 200 log<sub>10</sub>2 6 12 12

Figure 8: Different stages of HIV infection and AIDS<sup>84</sup>

Time (weeks)

The constitutional symptoms referred to in the figure are non-specific symptoms of ill health, for example, fevers, night sweats or weight loss. These differ from symptoms that are specific to disease in certain parts of the body, such as pain in the mouth with oral thrush or shortness of breath with pneumonia.

Time (years)

There is a significant time lag of about seven years between HIV infection and the onset of AIDS-related illnesses by about seven years. This is a key point to understanding HIV and AIDS and what sets the HIV/AIDS epidemic apart from other epidemics, like cholera for example. With diseases such as cholera, victims fall ill quickly. This alerts the general population and public health professionals who then take precautions to halt the spread. In the case of HIV, however, the epidemic silently creeps through the population and it is only later – when the HIV pool has risen to a considerable level – that the true impact is felt in terms of AIDS deaths. By then the epidemic is in full swing and – since there is no known cure – the only way people leave the pool of infections is by dying. This time lag is illustrated by the two curves in Figure 8 where the HIV curve precedes the AIDS curve by about five to eight years. This reflects the incubation period between infection and the onset of other illnesses.

Figure 9 illustrates this point clearly. The vertical axis represents the number of individuals affected and the horizontal axis time. At T1, when the level of HIV is at A1, the number of AIDS cases will be very much lower at B1. The AIDS cases will only reach

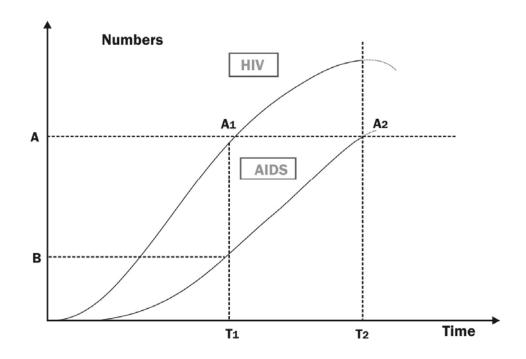
85 Whiteside et al., (2002, p. 2)

<sup>&</sup>lt;sup>84</sup> Wilson et al. (2002) The figure is a digitised representation of the original graph.

A2 (i.e. the same level as A1) at T2. A considerable amount of time will have elapsed and HIV will risen even higher, though it may be levelling off.

Sadly, "a levelling out of a country's HIV epidemic does not necessarily mean a decline in new cases, but may be caused by a rise in deaths." 86

Figure 9: The two epidemic curves<sup>87</sup>



Because of the particular trajectory of the disease as it transforms from HIV into AIDS, illnesses and symptoms change over time. The following table illustrates various stages of the HIV virus and the number of people likely to be affected.

<sup>&</sup>lt;sup>86</sup> Whiteside et al., (2002, p. 4)

<sup>&</sup>lt;sup>87</sup> Whiteside and Sunter (2000, p. 27). The figure is a digitised representation of the original graph.

Table 15: World Health Organisation clinical staging system for HIV Infection and disease in adults and adolescents

WHO Clinical stages 1 to 4		Performance scale	Number adults (14+) infected by stage*	
1	Acute HIV infection	fully active and asymptomatic)	1 476 000	
2	Early disease	symptomatic but nearly normal activity	1 098 000	
3	Late disease	bedridden < 50% of normal daytime	1 671 000	
4	AIDS	bedridden > 50% of normal daytime	534 000**	
5	Receiving antiretroviral treatment	symptomatic but nearly normal activity		
6	Discontinued antiretroviral treatment	bedridden > 50% of normal daytime		

<sup>\*</sup> Dorrington et al., 2004, p. 14

Children younger than 14 years old, whose HIV infections are between stages 1 to 3 are estimated at 211 000, and those in stage 4 are 33 000. The number of persons newly infected with HIV during 2004 is projected at 419 000 and the number AIDS-sick in the mid-year was projected at 525 000.

Generally, stage 1 concludes at the end of 12 weeks, stage 2 concludes at the end of about seven years, stage 3 last for about two years and stage 4 concludes with death.

The importance of Table 15 is that it indicates that the link between HIV/AIDS and poverty does not apply at all stages of the disease. It is only at stages 3 and 4 when the impacts become pronounced. During the period between infection to death, the longest stage is stage 2, which is when there are no particular poverty impacts. Similarly, during stage 5, the person infected with HIV/AIDS is likely to perform in much the same way as someone at stage 2. Stage 6 is much the same as stage 4. Table 14 is also important in projecting the likely number of AIDS deaths, with the likelihood that there will be considerable household reconfiguration, for example, orphans moving in with a grandmother.

Perhaps the greater extent of poverty impacts will occur after the death of the AIDS sick household member. This may be due to the high costs arising from burial practices and customs that may take a year to play out. Alternatively, many households might recover from the death of a family member, by maintaining the family structure or through reconfiguring the household. While confidently asserting that the greater poverty implications will occur after death, the actual numbers involved and the forms taken is unknown. This is discussed in more detail later.

<sup>\*\*</sup> Including those on treatment and those who have discontinued treatment.

The illnesses included in stages 1 to 3 are the same as those found in the general population and, to the extent that they differ among people having HIV, it will be in the frequency and severity of the illness. However, most are treatable and there are drugs available to prevent the occurrence and/or reoccurrence of some of the common opportunistic infections such as pneumocystis carinii pneumonia, TB, oesophageal thrush and cryptococcal meningitis. The exception is that no cures have been found for viruses such as influenza and for chronic diarrhoea when it is caused by protozoa. It is therefore possible to treat these AIDS *related* illnesses in large urban centres in South Africa, which have access to primary health care, prophylaxis and referral to larger hospitals. Most of the illnesses found in stage 4 however, the AIDS *defining* illnesses, seldom occur in the general population. Stage 4 is frequently referred to as 'full-blown' AIDS.

## Stages of the disease and urban poverty

These different stages of the HIV/AIDS infection intersect with urban poverty in a number of different ways.

During the course of the disease, from infection to death, the longest stage is stage 2. During this period, the individual is infected, but has no pronounced symptoms. As a result there are no particular poverty impacts. However in stages 3 and 4, symptoms become pronounced and the poverty impacts become severe. With the roll-out of anti-retrovirals however, the assumption is that stage 5 will be much the same as Stage 2. If however the anti-retrovirals are discontinued, stage 6 will be much the same as stage 4. The table is also important projecting the likely number of AIDS deaths, and the reconfiguration of households that this entails. Orphans, for example may have to move in with a grandmother. This suggests that perhaps the greatest poverty impacts occur after the death of the AIDS sick household member(s).

### Stages of the disease and the need for municipal services

The various stages of the disease will have different impacts on how households respond to prevention and care, which in turn relates to housing and municipal services. The following table, based on diseases that are common during Stages 1 to 4 shows the nature of households various needs for housing and municipal services to deal with the impacts of the disease. For example, it can be seen that in stage 3, clean water and sanitation are necessary for prevention of diarrhoea, treatment and the replacement of fluids, the provision of care and for preventing the illness from spreading.

This suggests that municipal managers can play an important role in mitigating the effects of HIV/AIDS by ensuring adequate provision of housing and the delivery of municipal services.

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<sup>&</sup>lt;sup>88</sup> Protozoa are single celled pathogens that can only divide within a host organism. Examples are the malaria parasite, plasmodium.

<sup>89</sup> Umhlaba Development Services (2003)

### Table 16: Examples of illnesses and the role of housing and services

#### 1. Acute HIV infection

For example: Seroconversion illness

*Symptoms*: Glandular fever-like symptoms including fever, rash, joint pains and enlarged lymph nodes at the time of seroconversion.

Comments: These illnesses do not depend directly on services for care and prevention

### 2. Early disease

For example: Herpes zoster or shingles

Symptoms: An intensely painful rash with blisters. In people with AIDS the rash is not confined to a single nerve territory, but is extensive across several territories. The blisters often occur on both sides of the body, combine to form large raw patches and are prone to secondary infection.

Comments: Poor personal hygiene creates a predisposition to many infectious skin conditions and is a risk factor for the development of secondary bacterial infection in skin conditions whatever the cause. Poor hygiene may put other household members at risk of infection.

#### 3. Late disease

For example: Unexplained chronic diarrhoea

Symptoms: Usually watery rather than bloody stools

Comments: Many of the pathogens are the same as those that cause diarrhoea in healthy people. However some are opportunistic and very difficult to treat. Caused by drinking water contaminated by sewage or eating food that has been in contact with contaminated water, flies or soiled hands. The risk of infection higher with inadequate sanitation and overcrowding. The cornerstone of management is the replacement of fluids. There is also a need to identify and treat the pathogen with appropriate antibiotics. Domestic, personal and food hygiene is very important in preventing infection and access to plentiful, clean water needed.

#### 4. AIDS

For example: Tuberculosis that has spread beyond the lungs to other organs Symptoms: Coughing, loss of appetite and weight, fever, night sweats. Because it is widespread throughout the body symptoms also relate to site of infection.

Comments: Probably the most common AIDS defining illness. TB requires a minimum of 6 months treatment, but responds as well to treatment as in non-HIV-infected people. Preventive treatment for people without active TB is available and cheap. However the risk of infection is higher with overcrowding.

The relationship between the HIV/AIDS pandemic and municipal services is a complex one. In households with young babies for example, where sanitation is poor and clean water not readily accessible, the infant runs a higher risk of dying from infectious disease than from HIV transmitted by the mother during breastfeeding. <sup>90</sup> Yet at the same time the absence of clean water will also force the mother to breastfeed, increasing the chance of mother-to-child transmission.

Lack of adequate services also contributes to the spread and seriousness of opportunistic infections. Inadequate water and sanitation compromise personal hygiene; inadequate refuse removal attracts flies and contaminates food; and a lack of energy to heat water and cook compromises the ability of household members to take care of the

<sup>90</sup> Handbook of HIV Medicine 2002: 296

ill. Chronic diarrhoea, in particular requires adequate levels of municipal infrastructure for the management of the disease – access to clean water to replace the fluids lost by the body and ready access to toilets.

The high prevalence of opportunistic infections, in turn, could shorten the period between HIV infection and the onset of onset of full-blown AIDS and death. That is, chronic parasitic infections, or infections generally, reduce the body's CD4 count and both undermine the ability of the immune system to fight off HIV infection and, due to the reduced CD4 count, also fight off other infections.<sup>91</sup>

While Wilson argues that while it is difficult to prove definitively that concurrent immune stimulation accelerates HIV progression, "the clinical and laboratory evidence suggests that this is very likely. Indeed, bursts of increased replication associated with opportunistic infections and parasitic co-infections could be contributing to the HIV transmission rates observed in sub-Saharan Africa, since viral loads in plasma and genital secretions correlate with each other and with infectivity". 92

## Housing needs generated by HIV/AIDS

Over and above increasing demands to deliver municipal services, local authorities will also have to address the specific housing needs generated by HIV/AIDS. <sup>93</sup> Poor quality shelter, for example, increases the risk of viral and bacterial respiratory infections, including pneumonia, while overcrowding is contributes to the risk of tuberculosis. Tuberculosis is especially important because "HIV infection is strongest risk factor for the progression of latent [TB] to active TB. Conversely, TB is the most common life-threatening HIV-infection worldwide." Housing also impacts on HIV/AIDS because space and privacy are important for the dignity of the patient and to enable care giving.

However the housing impacts of HIV/AIDS continue even after death as households try to reconfigure themselves. Children who are too young to provide care might be sent to live with grandparents. Alternatively households headed by children will remain behind. In other instances households splinter and only individuals remain.

Households that still function after the death of a family member will warrant the continuation of pre-existing housing policies and will still be able to access subsidised housing. However new household arrangements are likely to emerge in the context of household reconfiguration, which are not included in subsidy system. Families headed by HIV infected adults, child-headed families, expelled HIV positive family members, homeless children (not all of whom will be orphans and some proportion of whom will be HIV positive) will require shelter of some sort. This categorisation excludes children relocated to rural areas and sustained, with considerable hardship, by aged relatives. It also excludes families that have 'disappeared', a phenomenon found elsewhere in Africa

<sup>92</sup> Wilson et al. (2002, pp. 36, 37)

<sup>&</sup>lt;sup>91</sup> Natrass (2004)

<sup>93</sup> Tomlinson (2003)

<sup>94</sup> Handbook of HIV Medicine 2002: 34

and likely to occur in South Africa.<sup>95</sup> These new household configurations will generate new shelter requirements.

## Can municipalities provide?

The ability of local governments to provide municipal services and appropriate housing is likely to be severely strained as the disease becomes more and more prevalent. In addition to providing social services, care and prevention programmes, the local government will be obliged to provide municipal services for which there are user charges - water and sanitation, waste removal and energy. These services consume the large part of municipal budgets and the failure to pay for these services might be expected to have considerable impact on local government financial sustainability.

The International Red Cross International Water and Sanitation Centre notes that, "No examples have been found in the water and sanitation sector of systematic ways of addressing the [HIV/AIDS] impact on programs and service delivery, or assessing the impact of the programs on the spread of HIV/AIDS." Nonetheless the anticipation is that the enhanced service delivery will be required; that water companies will increase their tariffs accordingly; and that end users will be increasingly less able to contribute to the capital and operating costs of installations. <sup>96</sup>

This is problematical as it is assumed that local governments have the capacity to deliver, say, extra water to households with AIDS-related illnesses who are scattered throughout their jurisdictions, notably including slums. This is most unlikely. It is also assumed that services are being metered, billed and paid for. However, even in circumstances where services are being billed, there is widespread failure to pay for the services. Instead, in practice, it is likely that whatever services are being provided are often being provided for free to the households that have adult members with AIDS-related illnesses.

Further, it is assumed that were local governments to provide the services and to meter, bill and be paid for the services, the costs would be significant. This is not necessarily true, as the following speculative example shows:

"Suppose that 20% of a city's adults are HIV/AIDS positive or have AIDS. Suppose that this incidence is concentrated in 14% of the city's households. Suppose that in any one year 2% of the city's households have severely ill family members or have suffered from recent deaths and that another 2% are undergoing the trauma of change in household composition. If one then supposes that in households it is the primary income earner who is ill or who has died, then say, 3% of the city's households, most of whom were already not paying for services, now represent the additional financial burden for services.

<sup>&</sup>lt;sup>95</sup> Tomlinson (2001, p. 650)

<sup>&</sup>lt;sup>96</sup> IRC 2003

Last, it is assumed that the HIV/AIDS affected households live in close proximity to one another. Instead they will be dispersed mostly in low-income areas of the city. The delivery by local government of services to the 3% of the households by any means other than, for example, water tankers, is most unlikely.97

None of this takes into account the increase in number of households left impoverished due to the death of the breadwinner. It is here where the implications for payment for services will be most felt.

## Who gets ill and when?

A critical feature in addressing HIV/AIDS is understanding who gets ill, when the illness becomes manifest, and when death is likely. Figure 10 and Table 1698 make the point that HIV infection most affects young adults, beginning at about 20 years old in the case of women and 25 in the case of men.<sup>99</sup>. Due to the time lag between infection and death, it is among young and middle-aged adults that most deaths occur. This is when individuals dying of AIDS are at their most economically active and are raising children and caring for the elderly. This has two consequences: Firstly, the death of one or more income earning household members considerably increases the dependency burden on other household members. Secondly, household structures will be undermined leaving the old and the young without any social support or guidance.

A feature of the data is that prevalence shoots up very rapidly and is much higher among young women, and then is higher among middle-aged men. This is explained by the fact that in the midst of poverty, many women will be compelled to trade sexual favours out of desperation. This in effect is poverty-induced prostitution. However male behaviour is also significant in explaining this age discrepancy: "Men attract more sexual partners as they enter employment and acquire socio-economic status, and hence get infected at older ages on average." These older, more economically secure men are also likely to be forming multiple sexual partnerships with younger women who are in search of financial advantage.'101 In the latter instance the issue might be less one of prostitution than young women in search of higher-earning 'sugar daddies'. There are also circumstances where women are expected to prove their fertility before marriage. 102

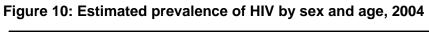
<sup>97</sup> Tomlinson (2005) 98 Dorrington et al. 2004: 15

<sup>&</sup>lt;sup>99</sup> Dorrington et al. 2004, p. 15

<sup>&</sup>lt;sup>100</sup> Johnson and Budlender (2002, p. iii)

<sup>&</sup>lt;sup>101</sup> Natrass (2004, p. 26)

<sup>&</sup>lt;sup>102</sup> Natrass (2004, p. 26)



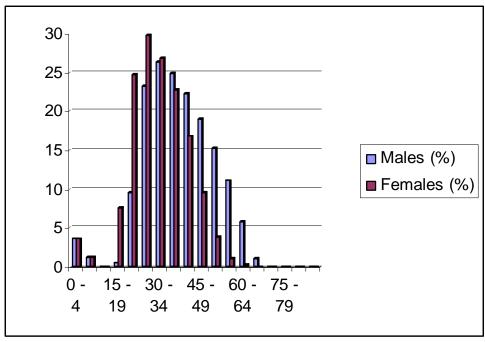


Table 16: Estimated prevalence of HIV by sex and age, 2004

Age Group	Males	Females
0-4	3.6%	3.6%
5-9	1.2%	1.2%
10-14	0.0%	0.0%
15-19	0.5%	7.6%
20-24	9.5%	24.7%
25-29	23.3%	29.7%
30-34	26.4%	26.8%
35-39	24.9%	22.7%
40-44	22.2%	16.8%
45-49	19.0%	9.6%
50-54	15.3%	3.8%
55-59	11.1%	1.0%
60-64	5.8%	0.2%
65-69	1.0%	0.0%
70-74	0.0%	0.0%
75-79	0.0%	0.0%
80-84	0.0%	0.0%
85+	0.0%	0.0%

The severe impact on a household's income is especially likely as a result of the duration and chronicity of the illness. Unlike malaria, for example where the period of the illness from onset to death - or cure - can be several days, the period for HIV/AIDS is significantly longer. It is over this period of many years that a family experiences increasing expenditure, asset reduction and declining incomes. Costs of HIV/AIDS illness are often increased by its terminal, mysterious and stigmatised nature that leads to major expenditure in search of cures. These factors exhaust the family's ability to address its shelter and services needs. 103

Even in the event that an individual affected by HIV/AIDS receives anti-retrovirals, it may be difficult to take the medication or to continue working. Patients are provided with antiretroviral drugs when the CD4 count reaches about 200. The drugs require that the patient has sufficient food and has eaten before taking the medication. However, a patient can often be very sick prior to reaching a CD4 count of 200, with the possibility of losing a job before the 200 mark is reached. Once the patient has regained reasonable health, the patient will then face the task of obtaining a job in an environment that might now be clouded with stigma. In other words, although the patient's performance might recover, his or her income might not.

As the illness becomes progressively more severe over time, the income-earners will become increasingly unable to work. Because the HIV positive person is not unduly ill during stages 1 and 2 of the disease, the income-earning capacity of the individual is not unduly compromised during these relatively long stages of the disease. However it is during stages 3 and 4, when the illnesses become more severe that the person's ability to work and performance declines. During this period, her or his earnings will decline and expenditures on medicines (and certain other items) will increase.

The provision of care during stages 3 and 4 also requires the consumption of additional services, water and electricity in particular. In fact, consumption may exceed the free basic services levels of 6kl of water per household per month and 50 kWh of electricity per household per month 104. Presuming that metered services connections are available, local governments might worry about the implications for payment. There will be those who are consuming above the free basic services level and who are not paying for services, those who are paying and despite being affected by HIV/AIDS are able to continue doing so, and those who are crashed into poverty as a result of an income earner becoming ill and ceasing to pay for services. The issue for the local authority is to absorb the increased consumption of services and the decreased payment for services of households who are crashed into poverty. 105

<sup>103</sup> Tomlinson, 2003

<sup>&</sup>lt;sup>104</sup> Tomlinson (2004)

<sup>&</sup>lt;sup>105</sup> Booysen et al (2002)

### CHAPTER 6: HIV/ AIDS AND URBAN POVERTY

There is little conclusive evidence about the relationship between HIV/AIDS and poverty. Some researches have found that "HIV risk is...influenced by socio-economic factors such as income, education and employment status" Others argue that "the most important demographic predictors of HIV are: race, age, sex of respondent, locality type and province of residence. Education and economic status [are] not significant independent predictors ... Similarly a survey in a rural district of Sekhukhuneland in Limpopo Province, found that there is an '... absence of an association between HIV prevalence and ... poverty and education ... 108,

There are thus three interpretations of the relationship between HIV/AIDS and poverty.

The first interpretation argues that there is no link between HIV/AIDS and poverty. Johnson and Budlender for example state the following:

There are a number of arguments explaining why higher rates of infection might be expected among the poor, but there are also several to explain why patterns of infection may be the other way around.<sup>109</sup>

It is not clear, however, that wealthier individuals are necessarily at a lower risk of infection. It can be argued that as men earn more and their socio-economic status rises, they are able to attract greater numbers of sexual partners, which places them at greater risk of infection. <sup>110</sup>

Analysis of levels of education reported by women attending public antenatal clinics in 1998 and 1999 shows that women with no education are in fact at a lower risk of HIV infection than women who have received high school education – but women who have received tertiary education have the lowest risk of all.<sup>111</sup>

There is little reliable data on the relationship between employment status and HIV prevalence. 112

The second interpretation argues that perhaps the numbers have been used incorrectly. This can possibly be ascribed to the fact that for most of the period during which people have HIV/AIDS their performance, productivity and income will not be impaired. This will also be true or those who have and are correctly using anti-retrovirals. Therefore attempts should not be made to correlate HIV prevalence, and poverty at all stages of the disease. Correlations are only likely to occur when the disease has reached stages 3 and 4, when a marked impact on socio-economic status can be anticipated.

<sup>&</sup>lt;sup>106</sup> Johnson and Budlender (2002, p. ii)

<sup>&</sup>lt;sup>107</sup> NM/HSRC (2002, p. 56)

<sup>108</sup> Pronyk et al (2005, draft)

<sup>109</sup> Johnson and Budlender (date??). 14

<sup>&</sup>lt;sup>110</sup> Johnson and Budlender (date??). 15

<sup>&</sup>lt;sup>111</sup> Johnson and Budlender (date??). 16

<sup>&</sup>lt;sup>112</sup> Johnson and Budlender (date??). 17

The third interpretation argues that while the link between the disease and poverty might be tenuous, it is the link between death and poverty that is correlates closely. Indeed, it has been argued that the greatest poverty impact of HIV/AIDS is among those left behind after the death of the person who has AIDS. If this is the case, it is due to the fact that young and middle-aged adults are doing most of the dying which creates a tremendous dependency burden.

While there is no debate that HIV/AIDS will exacerbate poverty, questions remain about who will be most adversely affected: those who are ill, or those who remain behind after the AIDS infected person has died. This question relates to the balance between the number of households that remain sustainable after an AIDS death; the number of households that are successfully reconfigured; and the number of households that fragment, leaving behind orphans; the elderly who struggle to care for family members; and members of the extended family who struggle to provide assistance of some sort. The question also relates to where local governments can hope to make a significant contribution. This will require a response from local government that looks both at the poverty impacts of on families living with HIV/AIDS as well as families living with the aftermath of the scourge.

There are two sides to the issue: how does HIV/AIDS affect urban poverty and how does urban poverty affect HIV/AIDS?

## The impact of HIV/AIDS on household income and expenditure

There are both direct and indirect costs for households confronting HIV/AIDS. According to Booysens, "Direct costs include the cost of medical treatment and transport expenses required to reach health care facilities so as to receive treatment. In the case of deaths, funeral costs represent another direct cost. In the case of illness, indirect costs include the loss of income to the ill person and to those persons caring for the ill, including both direct care and time spent accompanying the ill person on visits to health care facilities. 113 [emphasis added]

These costs change over time, first in relation to illness and later in relation to death 114.

The first phase begins with illness. Precisely because HIV is concentrated in the age group when people are likely to be economically active, the first response to illness is to move from directly productive activities into service-oriented jobs. This allows infected individuals to work at jobs that require less physical effort. However, these jobs pay less. Inevitably, as the illness progresses, the individual works less, earning progressively less money. Increasing illness also means that household members might have to work less to care for the sick. This may have long term effects on the household's income

Booysen et al. (2002, p. 19)

114 Gow and Desmond 114 identify three phases in the impact of HIV/AIDS on household and community incomes, with the third comprising longer-term coping strategies. (ref)

generating capacity if children are drawn out of school to care for the ill and to compensate for the burdens placed on older women. And if it is the older women that are ill, it is even more likely that children will be taken out of school, compromising their education and their opportunities to improve their economic prospects.

At the same time as household incomes decrease, costs increase, especially in respect of medicines, transport and time. Inevitably the changing balance between incomes and costs leads to a re-alignment of household expenditure priorities. The largest increase is for medicines for the ill member(s) of the family. The cost of medicines declines at the last stages of the illness. The shrinkage and reallocation of household incomes reduces food security and increases malnutrition and illness within the family, especially among children. The decrease in expenditure on other household members increases their susceptibility to HIV.

Of particular interest for the SACN is that the allocation of household expenditure is expected to turn away from municipal services. However surveys of low-income and poverty stricken households will reveal little when the household was, in the first place, paying little or nothing for services. 115 That is, one cannot start with the assumption that services are being metered, billed and paid for. A point noted earlier, the issue for municipalities does not reside in the really poor, who were already not paying for services, or in households that remain financially viable, but in households that are crashed into poverty and cease paying for services.

The second phase begins with death. Death concludes the medical expenses, but results in an even more onerous expense: the funeral. Large funerals with many people and much food, and expensive coffins, 'can drive families into debt and financial devastation. 116 Death among poorer families causes them to draw on assets to cushion these expenses and to again change household expenditure priorities. Among "really poor" households, where expenditure on food approaches 50% of total household costs, the intake of food may drop sharply.

The downward spiral is affected by which household member is ill or dies<sup>117</sup>. Dramatic findings from Zambia show that amongst household where the father dies, "Monthly disposable income of more than two-thirds of the families ... fell by more than 80%." 118 If a female who is not the head of the household dies, her death will have less impact on the household income. Similarly the ill-health of an unemployed person or child will have little impact on the income of the household, unless an income earner has to withdraw from income earning opportunities in order to care for the dying unemployed member.

This situation differs in South Africa which has high unemployment and where there is pervasive dependence on social grants. Here the income earner may be a child who warrants child support grants or the elderly who get pensions. Indeed, the death of a

<sup>115</sup> Booysen et (2002)
116 Foster, (1996); cited in Gow and Desmond (2002, p. 114)
117 Gow and Desmond

<sup>&</sup>lt;sup>118</sup> Barnett and Whiteside 2002: 190

young adult who was previously unemployed and who has consumed family income for medical costs may, after taking funeral costs into account, improve the family's material circumstances. The death of a person obtaining a pension may potentially be more significant.

The third phase entails longer-term 'coping strategies', even though it could be argued that these should rather be thought of as 'survival strategies' given that:

- often households do not cope and then break up;
- often it is individuals that cope and not households;
- ad hoc responses to crisis should not be dignified with the notion that this represent a strategy; and
- the notion of coping is inappropriate when the mechanism entails leaving school, eating less, and so on.

The survival stage entails one or more of four strategies: doing nothing, withdrawing savings or selling assets, assistance from other families and the community, and altering household composition. 120

In cases where households 'do nothing' they may simply lack the resources to respond in any meaningful way to the death of an income-generating member of the family. This seems contradictory. Doing nothing requires that households have sufficient resources to do so. Doing nothing surely requires dependence on one or more of the other three coping strategies. If a household lacks sufficient resources and if it cannot benefit from one of the other coping strategies, then losing an income earning members of the family may be disintegration. Mutangadrua<sup>121</sup> found that in a study of 215 households in urban and rural areas in Zimbabwe, 65% of the households where an adult female had died had ceased to exist. The suggestion is that when the mother dies, it is equivalent to both parents dying.

Another coping strategy entails the sale of whatever assets are at hand. An asset may be a radio or a sheep. Radios are something households can do without. Sheep are productive assets and the sale of such assets hastens the downward spiral. Households may withdraw from stokvels and may also borrow from micro-finance organisations in order, for example, to pay for funerals. Both responses have long-term implications for the ability of the household to sustain basic needs, especially food.

Households that have lost an income-generating member to AIDS may rely on assistance from neighbours and families. While this was the position of the 1990s<sup>122</sup>, there are indications that this can no longer be sustained. Thus, "in African countries that have had long, severe epidemics, AIDS is generating orphans so quickly that family structures can no longer cope. Traditional safety nest are unravelling ...' Referring to

THE CHALLENGE OF HIV/AIDS FOR SOUTH AFRICAN CITIES

<sup>&</sup>lt;sup>119</sup> Barnett and Whiteside 2002

<sup>121</sup> Mutangadrua 2000, cited by Gow and Desmond 2002:117

<sup>&</sup>lt;sup>122</sup> Barnett and Whiteside 2002: 198, 199

their interviews in Tshwane, Mbombela and Dihlabeng, in a draft report, C A S E reported that:

The 'community' is involved in helping households affected by AIDS in a variety of ways. In Dihlabeng many informants spoke about the culture of giving/sharing in this community. "I really see these people sharing, that's the main coping strategy. If you have one loaf of bread you share. Jobs are scarce so people have to share". In Mbombela, a group of children from a child headed household are often seen going around the neighbourhood with a container asking neighbours for paraffin to cook food. In the same area, we heard about neighbours taking turns to buy mielie meal each month for a child headed household. However it is recognised that this willingness to help may dry up - in Tshwane it was noted that "when days are dark, friends are few." 123

Although there is little empirical information available on long-term changes in household composition in the era of HIV/AIDS, the common generalisation is that since adult deaths tend to cluster within specific families, the death of the adults will most often lead to the destruction of the family as a functioning household unit. In these circumstances, when it is possible, relatives and friends will often take in the children, although perhaps not keeping the children together. Most often the burden will fall upon grandparents, the grandmother in particular.

"Generally, people tend to move to or group around someone with an income either an employee's income or someone receiving a grant. Grandmothers are a popular choice here because unlike other relatives, e.g. siblings they tend not to have other dependants and are often willing to look after their children and grandchildren." 124

However, rather than view this outcome as ideal, it may be "dreadful" as it involves "hunger and crowding in an emotionally and economically stretched family unit" 125.

### The reallocation of household expenditure

While household incomes decrease, costs increase, especially in respect of medicines, transport and time. This leads to a re-alignment of household expenditure priorities. More money will be spent on medicines for the ill member(s) of the family and less on food and other essentials. This in turn increases malnutrition and illness within the family, especially among children. The decrease in expenditure on other household members increases their susceptibility to HIV.

Of particular interest for city mangers is that households might be less able to pay for municipal services. While many of these households may have already been receiving free services, it is a concern that households who previously been paying, but who have been crashed into poverty due to HIV/AIDS will then cease paying for these services.

<sup>&</sup>lt;sup>123</sup> CASE 2002 <sup>124</sup> CASE 2002 page??

<sup>&</sup>lt;sup>125</sup> Crewe 2000: 8

Funerals are another major expense with households spending four times their monthly household income on burials<sup>126</sup>. The cost of paying for funerals considerably exceeds the cost of medical expenditure.

## Individual coping strategies

Referring to their interviews in Tshwane, Mbombela and Dihlabeng, C A S E reported the following main individual coping mechanisms:

- "Sex work: Young girls and boys are turning to prostitution as a survival mechanism. This is likely to further fuel the epidemic. In Tshwane, one participant spoke of "stoke madams" older women who give young boys food in exchange for sex. A study in Zambia found a similar practice with young boys living in the streets. The boys known as 'mishanga' boys turn to their sugar mummies and give sex in exchange for money, food and even shelter. These boys, some as young as 8 years old risk getting HIV from the sugar mummies and then there is also the risk of the boys spreading the infection to girls their own age<sup>127</sup>.
- Informal employment: Spaza shops, selling fruits and vegetables
- Children begging in the streets: For many orphans and children from poor households the streets still remain the only option for finding food or money.
- Alcohol and drug abuse: The Child Welfare in Dihlabeng expressed concern about the high levels of substance abuse among children and mentioned that they had just received 72 new cases."

Many households and individuals rely on one or more social grants as a means of coping. These are available in South Africa, Botswana and Namibia as opposed to many other sub-Saharan countries. This means that in circumstances of massive unemployment, the 'productive' age group is not necessarily the income generating age group. Old age pensioners, the disabled, and potentially children from poor households or those orphaned and eligible for the foster care grant may contribute more to household incomes than family members of working age. These grants are listed in Table 17.

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Steinberg et al. (2002) found that overall households were spending in funerals Booysen at al's (2002) figure is 3.7 times monthly household income and 5.7 times monthly household expenditure.
127 Kelly ???

Table 17: Social grants<sup>128</sup>

Grant Type	Amount	
Old Age Grant	R700	
Disability Grant, which includes someone with full blown AIDS	R700	
Foster Child Grant	R500	
Care Dependency Grant	R700	
Child Support Grant	R160	
Grant in Aid	R150	

In 1994 R10 billion was spent on social grants and there were 2.6 million beneficiaries and in 2003 the expenditure was R34.8 billion and there were 6.8 million beneficiaries. It is speculated that it is due to these grants that there has been a 3.4% decline in households with a monthly income of less than R800, and that it is due to increasing unemployment that there has been a 3.5% increase in households with an income of less than R3 500.129

Table 18: TITLE???

Households with an income of less than R800pm in 1996	3 816 240
Households with an income of less than R800pm in 2001	3 159 884
% change households with an income of less than R800	-3.40%
Households with an income of less than R3 500pm in 1996	7 209 706
Households with an income of less than R3 500pm in 1996	6 133 377
Households with an income of less than R3 500pm in 2001	7 209 706
% change of households with an income of less thanR3 500	3.51%

Added to social grants are the housing subsidy and the widespread tolerance of nonpayment for services. These represent grants that further enhance household incomes.

## The impact of HIV/AIDS on women, children and the elderly

HIV/AIDS impacts heavily on vulnerable groups such as people living in informal settlements, women, orphans and child-headed households, and the elderly.

In the context of HIV/AIDS and poverty, women have the worst of all worlds. According to Albertyn and Hassim<sup>130</sup>:

<sup>&</sup>lt;sup>128</sup> The grants and their value have been dawn from the Department of Social Development website. A description of the grants, also drawn from the Department's website, is in Annexure 1. Tomlinson, et al. 2003

<sup>&</sup>lt;sup>130</sup> 2004: 17, 18

"In general, women's vulnerability to HIV/AIDS emerges from, and thus emphasises, the interaction between social, economic and political relations shaping women's relative lack of agency and choice. This gendered vulnerability is also evident in the impact of HIV/AIDS on the individual, family and community, as HIV/AIDS deepens gender inequalities in a material and a social sense. Women not only slip further down the socio-economic ladder when infected and affected by HIV/AIDS, but also become subject to greater stigmatisation and control. HIV/AIDS thus reinforces old inequalities, as well as introducing a new set of direct costs for women as a result of these inequalities."

## Bray says<sup>131</sup>:

"Whether widowed or not, women in South Africa are the ones who provide the majority of care and services to children, yet it is they who are often left without shelter, property or a means of support when their partners die or they themselves become very ill... In a context of low marriage rates and high rates of divorce and separation ... the mother and her family are expected to look after children."

## And concluding with C A S E<sup>132</sup>:

"One of the main scenarios described in discussions was of a grandmother taking care of her grandchildren after their mother has passed away. Grandparents in this situation would also require more space than they had anticipated requiring in their old age. Often the households that grandmothers (or grandparents) head are very large, because they are caring for their ill children plus their children's children ... accommodation is often a major problem for elderly people ..."

Then when the grandparents ultimately die, children are orphaned yet again with fewer options for care.

The following statistics illustrate the point:

- 1. 38% of households in Johannesburg are headed by women, with the number being slightly above 40% for black and coloured women. 133
- 2. Women make up 43% of those in employment in Johannesburg and work in lower paid economic sectors. In Johannesburg 31% of black women work in private households, 20% in community services, and 17% in wholesale and retail.
- 3. As a result, 70% of black women earn less than R1 600 per month.
- 4. In research in the Free State, 'approximately 70% of the households looking after orphans are headed by women', 134
- 5. Nationwide, "uninfected children born to infected mothers have a 2.4 3.6 times greater chance of dying than children borne to uninfected mothers. Also, there is a

<sup>134</sup> Bray (2003, p. 34)

<sup>131 (2003,</sup> p. 34): 132 (2002, p. 1) 133 Notes 1. to 3. are taken from Van Donk (2004)

direct relationship between the severity of maternal disease and the risk of children acquiring opportunistic infections and dying early in life.' 135

African women bear the brunt of inequality, shoulder the burden of supporting those who have ADIs, and have the least support and security. This has significant implications for the provision of shelter and for care. For example, if low income women have to pay for water, this will severely limit the amount of water available for care giving.

Requiring payment for services essentially targets women and even more so those caring for persons with HIV and AIDS, particularly grandmothers caring for children. These considerations may not be taken into account by the metros in their service delivery programmes and budgets, and generally not included in the cities' Integrated Development Plans. 136

Children are also subject to particular vulnerabilities in the face of HIV/AIDS. It has been argued that:

"From a broad policy perspective, I don't think we should be disaggregating HIV+ children from HIV+ orphans, HIV+ orphans from HIV- orphans, or for that matter orphans in general from other children living in poverty. The issues - besides that of medical treatment/support for HIV+ children/orphans - are generally shared by the various categories of children. In the face of the AIDS pandemic then, surely we need to be a) ensuring HIV+ people are able to access treatment b) doing everything we can to be thinking through poverty alleviation issues for all South Africans.

We are arguing that the best approach to grant provision for children in the context of AIDS would be to make sure that every child in SA could access a [child support grant] until they are 18, rather than this currently limited approach of a limited [child support grant] and a foster care grant to alleviate the poverty of some orphans...<sup>137</sup>

While a survey in the Gauteng AIDS Programme<sup>138</sup> reports that 80% of families were willing to care for a relative with AIDS, it is unclear that this willingness to provide services will be sustained. Thus,

"... Despite the deep-rooted nature of extended family networks, the capacity of communities and households to cope has been undermined by the growing number of AIDS orphans. ... 72 per cent of households caring for children in distress experienced financial hardships as a consequence of hosting a child in distress. Extended family structures cannot, therefore, be assumed to remain resilient in the face of overwhelming orphan numbers, shrinking numbers of potential caregivers and over-stretched financial and other resources. Additionally, the stigma of AIDS will certainly influence the response towards

<sup>&</sup>lt;sup>135</sup> Giese (2002, p. 61)

<sup>&</sup>lt;sup>136</sup> Van Donk, 2004.

<sup>&</sup>lt;sup>137</sup> Dr Helen Meintjes, e-mail communication

<sup>138</sup> Gauteng AIDS Programme (2002/3, p. 31)

many affected children. Thus, many children are or will be left outside the traditional social safety net. 139

#### Furthermore:

There was a time when there were virtually no orphans, in a figurative sense, (and no child-headed households in real terms) in African societies – thanks to the values embedded in the Extended Family Tradition which viewed the care of orphans as a matter of duty and obligation. While the Extended Family Institution remains strong and continues to absorb orphans, it does appear to be caving in under the weight of

- Confounding numbers of AIDS orphans.
- The gradual erosion of the values that sustained it
- Urbanization and the increasing primacy of the nuclear family
- Unemployment
- Financial hardships
- Abject poverty<sup>140</sup>

Amongst the vulnerable groups of children, orphans, HIV+ orphans, and child-headed households - AIDS orphans bear a particularly heavy burden. This is because

"these children are more likely than other children to lose both parents, often in relatively quick succession... Very young children orphaned by AIDS are more likely than other children to encounter stigma and ostracism...

The vulnerability of children orphaned by AIDS and their family starts well before the death of a parent. The emotional anguish of the children begins with parent's distress and progressive illness. This is compounded as the disease causes drastic changes in family structure, taking a heavy economic toll, requiring children to become caretakers and breadwinners, and fuelling conflict as a result of stigma, blame and rejection. Eventually, the children suffer from the death of their parents(s) and the emotional trauma involved. They then have to adjust to a new situation with little or no support, or they may suffer from exploitation and abuse. 141

#### Natrass goes further and argues that

"As the burden imposed by AIDS gets ever greater for households, it is likely that more children will be abandoned as extended families reach a point at which they can no longer support the children. But consider for a moment which children are likely to be abandoned first: the HIV-positive children or the HIV-negative? Given that the burden of care is much greater for HIV-positive children, and given that 'investing' in HIV-positive is unlikely ever to yield a return in terms of future earnings, it stands to reason that that the HIV-positive children are likely to be abandoned first. There is a] growing number of abandoned HIV-positive children

<sup>&</sup>lt;sup>139</sup> Nelson Mandela Children's Fund (2004, slide 13)

Nelson Mandela Children's Fund (2004, slide 37)

<sup>&</sup>lt;sup>141</sup> UNAIDS (2002, p. 134)

in state-funded and private-funded hospices and shelters... paediatric wards are flooded with HIV-positive children ..." 142

In other instances children are forced to take on adult responsibilities as the heads of newly reconfigured households. Although current data does not allow for a reliable assessment of the number of child-headed households, let alone how many of these are headed by girls, anecdotal evidence suggests that the phenomenon is on the increase, especially in the era of HIV/AIDS. Yet it remains largely hidden to the eye of policy makers and planners, in large part because these households do not qualify for existing state support measures. In these households, girls tend to take on adult and maternal roles before their time, with far-reaching implications for their education and future development prospects.<sup>143</sup>

The elderly represent another particularly vulnerable grouping. In Zimbabwe, for example.

"AIDS has been labelled "the grandmothers' disease" because, ... it is the elderly who bear the burden of caring for the sick and the survivors. This is care they perform with great difficulty due to their own limited wealth, education, capital and work opportunities. Not only are these grandmothers caring for orphaned children, they are also deprived of their own financial security by the loss of their own children – the parents of the orphans now in their care -- to AIDS. Without social and economic support in countries that provide little or no social security to the elderly, these grandparents invariably become destitute. The consequences for future growth are devastating with orphans entrenched in a cycle of poverty and limited potential for escape. 144

Increases in AIDS morbidity and mortality will reduce the availability of members of the young adult generation. Adult children will be sick or disabled for long periods of time and later die. They may lose the capacity to earn the income that would have been otherwise transferred to their aging parents. They may also require additional resources for their own support and medical care. Thus the elderly suffer a double burden with likely implications for their own health status and well-being: they become caregivers of the younger generations, first of their adult children and then of the AIDS orphans, and may find themselves without the income transfers from the middle generations, so that net resource flows may be from rather than to aging parents. Moreover, the physical and psychological well-being of older persons will be affected not only by the death of adult children and foregone transfers of income, goods and services, but also by the need to raise additional cash by diluting assets or deploying more hours of work to satisfy the increased burden entailed by the protracted nature of the illness. With its implied long-lasting health impairments on adult individuals, the disease jeopardizes households' ability

<sup>&</sup>lt;sup>142</sup> Natrass (2004, p. 80) <sup>143</sup> Van Donk (2004, p. 40)

<sup>&</sup>lt;sup>144</sup> Van Niekerk et al. (2001, p. 14)

to generate resources for the care of households' most vulnerable members, namely, children and elderly,  $\dots^{145}$ 

# Poverty needs arising from HIV/AIDS

Table 20 presents a brief summary of the needs generated as a result of illness or death which local governments can begin to address.

Table 20: Poverty needs arising from HIV/AIDS

	III	Orphans	Elderly	Household
Prevention				
WHO Stage 3	Access to grants Medication Access to medication Food Shelter & services Protection against stigma e.g. loss of job Home based care Social services			Access to grants Jobs (e.g. EPWP) Food Shelter & services
WHO Stage 4	Access to grants Medication Access to medication Food Shelter & services Home based care Social services Spiritual support			Access to grants Jobs (e.g. EPWP) Food Shelter & services Social services Spiritual support
Funeral				Support with funeral expenses
Household reconfiguration		Access to grants Food Clothing Educational requirements Shelter & services Protection of assets, against stigma & exploitation Social services Spiritual support	Access to grants Food Shelter & services Clothing Social services Spiritual support	Access to grants Jobs (e.g. EPWP) Food Shelter & services Women protection of assets Social services Spiritual support

<sup>&</sup>lt;sup>145</sup> Merli and Palloni (2004, pp. 4, 5)

These needs are based on:

- enhancing the livelihood strategies of the most vulnerable groupings by ensuring access to grants
- ensuring that HIV/AIDS infected individuals do not loose their jobs due to stigma
  protecting household income so that affected household can afford medication;
  food, which also is required in order to take the medication; educational
  requirements; shelter and services, especially in informal settlements;
- providing home based care;
- · protecting against exploitation;
- · protecting assets; and
- providing spiritual support.

The needs created by HIV/AIDS illness and set the agenda for local government intervention.

## CHAPTER 7: INSTITUTIONAL RESPONSE TO HIV/ AIDS

In recent years various non-governmental organisations (NGOs), faith-based organisations (FBOs), medical personnel and local governments have been actively engaged in addressing HIV/AIDS. Some of these organisations were surveyed in August 2005 to identify the partnerships, collaborations or productive overlaps among those involved in HIV related service provision. This survey revealed examples of some extremely creative collaborative programs in certain cities but also identified gaps where concerted efforts are strongly required.

#### Government level

The most recurrent theme emerging from different government officials is the lack of a clear understanding of the different roles that the local and provincial levels can play in addressing HIV/AIDS. This was most notable in the case of eThekweni, where this study identified a need for better engagement between the two spheres of government. Provincial and local governments are struggling to work with each other in facilitating different spheres of HIV-related service provision. The province of KwaZulu Natal has no provision for service level agreements or memorandums of understanding that can be used to engage with the city municipalities. KwaZulu Natal could learn from the Western Cape and Free State, with respect to Cape Town and Mangaung.

In the Western Cape, local government is generally very proactive, especially in HIV prevention and care related activities. Local government also has generally good relationships with the provincial HIV/AIDS team. For instance, local government officials participated in the Global Fund discussions for the province and are involved with the facilitation of provincial funding. But concern was expressed with the recent move at national level to take primary health care from the local government portfolio, leaving it with only environmental health. The purpose of this is to create an integrated health

service system. This might be effective in smaller cities or in rural areas where local municipalities are not as active as they are in metros like Cape Town. Given the involvement of local governments in HIV related service provision, and their greater closeness to organisations at the grassroots level, the argument made against such a move seems justified.

Politics at the provincial level can also get in the way of service delivery, creating obstacles to implementation. HIV/AIDS remains a highly politicised issue. Individual agendas, strict ownership of programmes, and personality clashes make effective cooperation difficult among different levels of government.

## Civil society and medical practitioners

There is a need for dialogue between different actors in this field. There are many dedicated organisations and individuals working in different but related areas that could create useful synergies to make service provision more effective and accessible. What is lacking is communication and cooperation amongst these different actors. This study provides strong evidence that in places where such connections exist, the implementation of programmes, delivery of service and achievement of targets is much more successful. Four case studies have been highlighted in this regard (a) Johannesburg's Enseleen Clinic; (b) CAPRISA in eThekweni, (c) Cell Life project in Cape Town and (c) Love Life in Mangaung

## Role of faith-based organisations

FBOs emerged as strong actors in promoting HIV service provision. In all the cities visited, these organisations were highly involved in the field, and ran some of the most successful programmes. Despite these successes, FBOs were also criticised by other actors.

One of the biggest problems relates to the conflicting prevention messages being sent out by FBOs, which were seen to set back prevention programmes even further. Some FBOs had problems talking about safe sex, with the focus being on abstinence. When asked about condom availability in an FBO working directly with HIV prevention and care programmes, the respondent indignantly replied, "We don't preach condoms here, we preach abstinence. Why would we be promoting condoms?"

The other problem with FBO's was the propagation of a discourse of guilt with respect to sinful sexual acts and divine punishment. Medical practitioners and NGOs felt that this discouraged patients from coming forward to get tested or seek early treatment. Despite criticisms, there are instances of successful programmes run by FBOs, especially in facilitating anti-retroviral roll-out. An interesting theme in these successful programmes was the incorporation of partnerships with other organisations or individuals by the churches, especially with medical practitioners. An example of such a partnership is is the eThekweni-based organisation called Sino Sizo.

## Implication of migration on HIV/AIDS service provision

The study found evidence that cities tend to plan for static populations, ignoring the dynamism of migratory trends. This undoubtedly leads to misplaced planning. Also, the rural areas of migratory origin are being neglected in studies of how ARV roll-out should take place. Although the need for ARVs and other related service provision is felt more in the cities, some respondents mentioned that this may be due to bad service provision in rural areas that encourage people to access health services in the city. An ARV roll-out programme started with Pepfar funding in Vulendela, a rural site close to Masudunzi, reported seeing the beginning of return migration or at least accelerated frequency of visits by migrant men to access ARVs. A smaller city like Mangaung needs to pay serious attention to migration as well as its rural surroundings, as it is on the brink of accelerating ARV roll-out.

Another problem cited by medical practitioners was the loss of follow up among ARV patients who are migrant workers, especially in Johannesburg, where patients come from as far as Venda in Limpopo. Doctors say that when patients travel long distances to access ARVs, their chances of adherence are lower than those coming from nearby areas. Adherence to treatment is also a challenge when working with any highly mobile population, for example piece workers, seasonal labour or fishermen at the ports.

Although almost all hospitals involved in ARV roll-outs require that the patients come from an address in their identified catchment area, people who are desperate for treatment give false addresses, making tracing of defaulting patients almost impossible. Even when the address is correct, a migrant may only be staying there temporarily. Respondents also mentioned that initially sick patients come regularly but once they start feeling better, they may begin defaulting. Defaulting by migrants may also be purely circumstantial, for example, when there is no more money to pay for transport or when an economic opportunity requires moving to another part of the city or a different city. Hunger was also noted to be a significant deterrent in adhering to treatment.

Finally, language was identified as a barrier in prevention, treatment and care. This is especially a problem for work with cross-border migrants or refugees and asylum seekers, but it is also a challenge with rural populations from different provinces or ethnic groups that do not share the same language as the service providers. Prevention material and messages often do not reach such people effectively. While prescribing treatment, doctors may not be able to do a proper determination of the patient's medical history. Hospices also struggle with language barriers and the terminally ill feel even more isolated in environments where they are not able to communicate.

## CHAPTER 8: CONCLUSION

A key finding is that one cannot assume that HIV/AIDS and poverty are linked. On the one hand it cannot be supposed that poverty gives rise to behaviours that increase exposure to possible HIV infection. This finding is counter-intuitive, for example, in the case of 'survival sex' mentioned earlier. Further, women who depend on men for a living have less capacity to ensure safe sex. There are many reasons to wonder about the findings but, on the whole, it seems that if low-incomes cause risky behaviour, so too might high incomes.

On the other hand having HIV does not, on the face of it, cause poverty. An examination of the data reveals that most persons who have HIV or AIDS are located in stages 1 and 2 of the disease as defined by the World Health Organisation (WHO) and will not experience impaired performance. At the same time, for those in WHO stage 4, access to ARVs restores health to the point that individual performance is restored.

Discussion of a link between HIV/AIDS and poverty runs foul of the fact that the majority of people with HIV/AIDS are not ill in a way that affects their productivity. Discussion of a link between HIV/AIDS and poverty that is based on a survey of those who are infected also misses those whose poverty arises from the death of a family member due to an AIDS-related illness.

It seems clear that the major link between HIV/AIDS and poverty is to be found in WHO stages 3 and 4, customs associated with funerals, and increased dependency.

In order to respond appropriately to the impacts of HIV/AIDS, local government will have to address:

- the severe impact on a household's income due to the duration and chronicity of the illness;
- the dependency burden created due to the fact that most deaths occur among young and middle-aged adults;
- the need for medication and food and, and in the case of orphans, the need clothing, school fees, uniforms and books;
- the protection of assets;
- the prevention of exploitation of children;
- the need for an increased consumption of services for care purposes at a level almost certainly above the free basic services level;
- the critical need for services in informal settlements;
- decreased payment for services of households who are crashed into poverty;
   and
- the potential for using shelter and services for the prevention of HIV and opportunistic and the care of those who are infected.

## The role of local government

According to the United Nations Development Programme, "The HIV/AIDS epidemic needs to be tackled on three fronts: (i) reducing the number of new infections and reversing the spread of the epidemic; (ii) progressively expanding access to care and treatment for people living with HIV and AIDS, and (iii) mitigating the impact of the epidemic on social and economic development ..."<sup>146</sup>

The role of local government can be conceptualised as one of using line items to best advantage and then coordinating, facilitating and contributing programmes that reduce poverty impacts. The context for line items is constitution, legislation and national government policy and programmes. Context for coordinating and facilitating are diverse programmes of three spheres of government, private sector, donors, NGOs, CBOs and FBOs.

A list of suggested objectives consists of:

- Reducing the dependency ratio at the outset through HIV prevention. It is all too
  obvious that the foremost HIV/AIDS poverty intervention is simply that of preventing
  infection.
- 2. Assisting those most affected by dependency, namely orphans, children and the elderly.
- 3. Preventing opportunistic infections.
- 4. Caring for the ill.
- Assisting the families of those who are ill.
- 6. Focusing efforts in informal settlements.
- 7. Providing specific assistance in respect of particular issues that arise from HIV/AIDS, for example, stigma and retaining jobs.
- 8. Providing specific assistance with the costs of funerals.

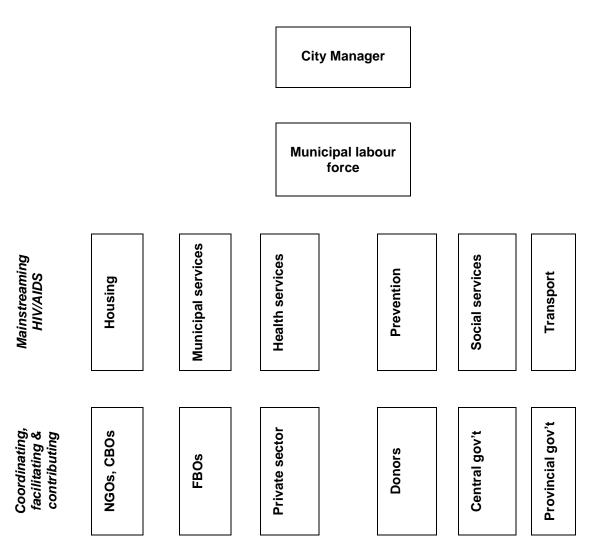
A conceptual depiction of the role of local government is as follows. <sup>147</sup> In the first instance, the city has to account for its labour force. Then the city has to mainstream HIV/AIDS within its line items. Johannesburg's *Human Development Strategy* goes some way to doing this. Then the city has to identify the HIV/AIDS related programmes to which it can contribute and then set out to do so.

<sup>&</sup>lt;sup>146</sup> UNDP (2001, p. 5)

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<sup>&</sup>lt;sup>147</sup> The diagram was suggested by Dr. Liz Floyd.

Figure 11: The role of local government in mitigating the poverty impacts of HIV/AIDS



Build social capital

It is apparent from this description of the role of local government that there is no magic wand and that local government certainly is not in a position to dominate HIV/AIDS programmes within its jurisdiction. Instead there will be an accumulation of programmes, many operating at a community level, that alleviate and reverse poverty and build social capital within the community.

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